GENERAL CATALOG FOR CLASSIFIED AREA

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### SEQUENCERS WITHOUT DIGITAL DIFFERENTIAL PRESSURE CONTROL FOR CLASSIFIED AREA

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Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

STANDARD FEATURES
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Air connections 6x4 RILSAN pipe
- Differential pressure digital control
- Differential pressure readout from internal transducer (max 10 kPa)
- Additional cycles after fan stop with fan mode selection.
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- ON/OFF Cleaning cycle from external contact.
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input / Output voltage selection.

OPTION ON REQUEST
- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

TECHNICAL FEATURES
- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage 230 VAC / 115 VAC
- Solenoid valves voltage 24 VAC / 24 VDC
- Operating temperature -10 °C + + 50 °C
- No. Outputs 16 Solenoid valves Max
- Power requirement 10 VA (Stand-by)
- Power requirement 30 VA Max ev. ON
- Protection degree IP65
- Material ABS
- dP Control With internal trasducer
- Air connection P1 - P2 6x4 RILSAN pipe
- Terminals 2,5 mm² - 250 VAC / 12 A

II 3D Ex tc IIC IP65 T100°C
Ex22BB32 SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION
Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

STANDARD FEATURES

- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Air connections 6x4 RILSAN pipe
- Differential pressure digital control
- Differential pressure readout from internal transducer (max 10 kPa)
- Additional cycles after fan stop with fan mode selection.
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- ON/OFF Cleaning cycle from external contact.
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input / Output voltage selection.

OPTION ON REQUEST

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

TECHNICAL FEATURES

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Operating temperature: - 10 °C + + 50 °C
- No. Outputs: 32 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Protection degree: IP65
- Material: PS Thermoplastish
- dP Control: With internal trasducer
- Air connection P1 - P2: 6x4 RILSAN pipe
- Terminals: 2,5 mm² - 250 VAC / 12 A

II 3D Ex tc IIIC IP65 T100°C

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Electronic Control System for dust collectors

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**DESCRIPTION**

Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

**STANDARD FEATURES**

- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Air connections 6x4 RILSAN pipe
- Differential pressure digital control
- Differential pressure readout from internal transducer (max 10 kPa)
- Additional cycles after fan stop with fan mode selection.
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- ON/OFF Cleaning cycle from external contact.
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input / Output voltage selection.

**OPTION ON REQUEST**

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

**TECHNICAL FEATURES**

| Standard supply voltage:       | 230 VAC / 115 VAC |
| Supply voltage on request:     | 24 VAC / 24 VDC   |
| Solenoid valves voltage        | 230 VAC / 115 VAC |
|                               | 24 VAC / 24 VDC   |
| Operating temperature          | -10 °C + 50 °C    |
| No. Outputs                    | 48 Solenoid valves Max |
| Power requirement              | 10 VA (Stand-by)  |
|                               | 30 VA Max ev. ON  |
| Protection degree              | IP65              |
| Material                       | PS Thermoplastish |
| dP Control                     | With internal trasducer |
| Air connection P1 - P2         | 6x4 RILSAN pipe   |
| Terminals                      | 2,5 mm² - 250 VAC / 12 A |

II 3D Ex tc IIIC IP65 T100°C
Ex22BC20 SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

STANDARD FEATURES

- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Digital differential pressure control (STOP at cycle end)
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- Consent from external compressed air pressure switch
- ON/OFF Cleaning cycle from external contact.
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input / Output voltage selection.

OPTION ON REQUEST

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

TECHNICAL FEATURES

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Operating temperature: -10 °C + + 50 °C
- No. Outputs: 20 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Maximum load power: 30 VA Max ev. ON
- Protection degree: IP65
- Material: PS Thermoplastish
- dP Control: With internal trasducer
- Air connection: P1 - P2 6x4 RILSAN pipe
- Terminals: 2.5 mm² - 250 VAC / 12 A

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SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

STANDARD FEATURES

- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Digital differential pressure control (STOP at cycle end)
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- Consent from external compressed air pressure switch
- ON/OFF Cleaning cycle from external contact.
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input / Output voltage selection.

OPTION ON REQUEST

- 4-20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

TECHNICAL FEATURES

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II 3D Ex tc IIIC IP65 T100°C

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Phone ++39 02 972 89 899   Fax ++39 02 972 89 270
**Ex22DB16 SEQUENCER FOR DEDUSTING PLANTS**

**DESCRIPTION**
Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

**STANDARD FEATURES**
- Minimum and maximum dP alarms on same relay (K2)
- Digital differential pressure control (STOP at cycle end)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- Consent from external compressed air pressure switch
- ON/OFF cleaning cycle from external contact
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input and output voltage selection

**TECHNICAL FEATURES**
- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Operating temperature: -10 °C + + 50 °C
- No. Outputs: 16 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Protection degree: IP65
- Material: ABS
- dP Control: With internal trasducer
- Air connection P1 - P2: 6x4 RILSAN pipe
- Terminals: 2,5 mm² - 250 VAC / 12 A

**OPTION ON REQUEST**
- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

II 3D Ex tc IIIC IP65 T100°C
Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

**STANDARD FEATURES**

- Minimum and maximum dP alarms on same relay (K2)
- Digital differential pressure control (STOP at cycle end)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH₂O.
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
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- ON/OFF cleaning cycle from external contact
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input and output voltage selection

**OPTION ON REQUEST**

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

**TECHNICAL FEATURES**

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Operating temperature: -10 °C + 50 °C
- No. Outputs: 32 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Protection degree: IP65
- Material: ABS
- dP Control: With internal trasducer
- Air connection P1 - P2: 6x4 RILSAN pipe
- Terminals: 2,5 mm² - 250 VAC / 12 A

II 3D Ex tc IIIC IP65 T100°C

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Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

**STANDARD FEATURES**

- Minimum and maximum dP alarms on same relay (K2)
- Digital differential pressure control (STOP at cycle end)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- Consent from external compressed air pressure switch
- ON/OFF cleaning cycle from external contact
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input and output voltage selection

**OPTION ON REQUEST**

- 4-20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

**TECHNICAL FEATURES**

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Solenoid valves voltage: 24 VAC / 24 VDC
- Operating temperature: -10 °C + 50 °C
- No. Outputs: 48 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Power requirement: 30 VA Max ev. ON
- Protection degree: IP65
- Material: Metallic
- dP Control: With internal trasducer
- Air connection P1 - P2: 6x4 RILSAN pipe
- Terminals: 2.5 mm² - 250 VAC / 12 A

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SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

STANDARD FEATURES

- Minimum and maximum dP alarms on same relay (K2)
- Digital differential pressure control (STOP at cycle end)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- Consent from external compressed air pressure switch
- ON/OFF cleaning cycle from external contact
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input and output voltage selection

OPTION ON REQUEST

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

TECHNICAL FEATURES

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Solenoid valves voltage: 24 VAC / 24 VDC
- Operating temperature: -10 °C + + 50 °C
- No. Outputs: 96 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Power requirement: 30 VA Max ev. ON
- Protection degree: IP65
- Material: Metallic
- dP Control: With internal trasducer
- Air connection P1 - P2: 6x4 RILSAN pipe
- Terminals: 2,5 mm² - 250 VAC / 12 A

II 3D Ex tc IIIC IP65 T100°C

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SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

STANDARD FEATURES

- Minimum and maximum dP alarms on same relay (K2)
- Digital differential pressure control (STOP at cycle end)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- Consent from external compressed air pressure switch
- ON/OFF cleaning cycle from external contact
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display

OPTION ON REQUEST

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

TECHNICAL FEATURES

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Solenoid valves voltage: 24 VAC / 24 VDC
- Operating temperature: -10 °C + + 40 °C
- No. Outputs: 48 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Power requirement: 30 VA Max ev. ON
- Protection degree: IP65
- Material: Metallic
- dP Control: With internal trasducer
- Air connection P1 - P2: 6x4 RILSAN pipe
- Terminals: 2,5 mm² - 250 VAC / 12 A

II 2D Ex tb IIIC T100°C Db IP66
II 2G Ex d IIB T5 Gb
**Ex1dDC16 SEQUENCER FOR DEDUSTING PLANTS**

**DESCRIPTION**
Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

**STANDARD FEATURES**
- Minimum and maximum dP alarms on same relay (K2)
- Digital differential pressure control (STOP at cycle end)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- Consent from external compressed air pressure switch
- ON/OFF cleaning cycle from external contact
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display

**OPTION ON REQUEST**
- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

**TECHNICAL FEATURES**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard supply voltage</td>
<td>230 VAC / 115 VAC</td>
</tr>
<tr>
<td>Supply voltage on request</td>
<td>24 VAC / 24 VDC</td>
</tr>
<tr>
<td>Solenoid valves voltage</td>
<td>230 VAC / 115 VAC</td>
</tr>
<tr>
<td></td>
<td>24 VAC / 24 VDC</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-10 °C + + 50 °C</td>
</tr>
<tr>
<td>No. Outputs</td>
<td>16 Solenoid valves Max</td>
</tr>
<tr>
<td>Power requirement</td>
<td>10 VA (Stand-by)</td>
</tr>
<tr>
<td></td>
<td>30 VA Max ev. ON</td>
</tr>
<tr>
<td>Protection degree</td>
<td>IP65</td>
</tr>
<tr>
<td>Material</td>
<td>Aluminium</td>
</tr>
<tr>
<td>dP Control</td>
<td>With internal trasducer</td>
</tr>
<tr>
<td>Air connection P1 - P2</td>
<td>6x4 RILSAN pipe</td>
</tr>
<tr>
<td>Terminals</td>
<td>2,5 mm² - 250 VAC / 12 A</td>
</tr>
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</table>

II 2D Ex tb IIIC T100°C Db IP65
II 2G Ex e mb/Ex ib IIC T5 Gb

**ESA Electronic Engineering s.r.l.**
Electronic Control System for dust collectors

info@esaelectronic.it  www.esaelectronic.it
Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

**STANDARD FEATURES**
- Minimum and maximum dP alarms on same relay (K2)
- Digital differential pressure control (STOP at cycle end)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- Consent from external compressed air pressure switch
- ON/OFF cleaning cycle from external contact
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display

**OPTION ON REQUEST**
- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

**TECHNICAL FEATURES**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Standard supply voltage</td>
<td>230 VAC / 115 VAC</td>
</tr>
<tr>
<td>Supply voltage on request</td>
<td>24 VAC / 24 VDC</td>
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<tr>
<td>Solenoid valves voltage</td>
<td>230 VAC / 115 VAC</td>
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<tr>
<td>Operating temperature</td>
<td>-10 °C + + 50 °C</td>
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<tr>
<td>No. Outputs</td>
<td>48 Solenoid valves Max</td>
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<tr>
<td>Power requirement</td>
<td>10 VA (Stand-by)</td>
</tr>
<tr>
<td>Protection degree</td>
<td>IP65</td>
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<tr>
<td>Material</td>
<td>Aluminium</td>
</tr>
<tr>
<td>dP Control</td>
<td>With internal trasducer</td>
</tr>
<tr>
<td>Air connection P1 - P2</td>
<td>6x4 RILSAN pipe</td>
</tr>
<tr>
<td>Terminals</td>
<td>2,5 mm² - 250 VAC / 12 A</td>
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II 2D Ex tb IIC T100°C Db IP65
II 2G Ex e mb/Ex ib IIC T5 Gb
**DESCRIPTION**

Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

**STANDARD FEATURES**

- Minimum and maximum dP alarms on same relay (K2)
- Digital differential pressure control (STOP at cycle end)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- Consent from external compressed air pressure switch
- ON/OFF cleaning cycle from external contact
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display

**OPTION ON REQUEST**

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

**TECHNICAL FEATURES**

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Solenoid valves: 24 VAC / 24 VDC
- Operating temperature: -10 °C + + 40 °C
- No. Outputs: 48 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- 30 VA Max ev. ON
- Protection degree: IP65
- Material: Metallic
- dP Control: With internal trasducer
- Air connection P1 - P2: 6x4 RILSAN pipe
- Terminals: 2,5 mm² - 250 VAC / 12 A

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**II 2D Ex tb IIIC T100°C Db IP66**
**DESCRIPTION**

Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

**STANDARD FEATURES**

- Minimum and maximum dP alarms on same relay (K2)
- Digital differential pressure control (STOP at cycle end)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- Consent from external compressed air pressure switch
- ON/OFF cleaning cycle from external contact
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display
- Input and output voltage selection

**OPTION ON REQUEST**

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

**TECHNICAL FEATURES**

| Standard supply voltage: | 230 VAC / 115 VAC |
| Supply voltage on request: | 24 VAC / 24 VDC |
| Solenoid valves voltage | 230 VAC / 115 VAC |
|                     | 24 VAC / 24 VDC |
| Operating temperature | - 10 °C + + 50 °C |
| No. Outputs | 16 Solenoid valves Max |
| Power requirement | 10 VA (Stand-by) |
|                     | 30 VA Max ev. ON |
| Protection degree | IP65 |
| Material | ABS |
| dP Control | With internal trasducer |
| Air connection P1 - P2 | 6x4 RILSAN pipe |
| Terminals | 2,5 mm² - 250 VAC / 12 A |

**II 3D Ex tc IIIC IP65 T100°C**

**ESA Electronic Engineering s.r.l.**

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Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
SEQUENCER FOR DEDUSTING PLANTS

**DESCRIPTION**

Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

**STANDARD FEATURES**

- Minimum and maximum dP alarms on same relay (K2)
- Digital differential pressure control (STOP at cycle end)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
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- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
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- ON/OFF cleaning cycle from external contact
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display
- Input and output voltage selection

**OPTION ON REQUEST**

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

**TECHNICAL FEATURES**

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<td>24 VAC / 24 VDC</td>
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<tr>
<td>Solenoid valves voltage</td>
<td>230 VAC / 115 VAC</td>
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<tr>
<td>Operating temperature</td>
<td>-10 °C to +50 °C</td>
</tr>
<tr>
<td>No. Outputs</td>
<td>32 Solenoid valves Max</td>
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<tr>
<td>Power requirement</td>
<td>10 VA (Stand-by)</td>
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<tr>
<td>Protection degree</td>
<td>IP65</td>
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<tr>
<td>Material</td>
<td>ABS</td>
</tr>
<tr>
<td>dP Control</td>
<td>With internal transducer</td>
</tr>
<tr>
<td>Air connection P1 - P2</td>
<td>6x4 RILSAN pipe</td>
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<tr>
<td>Terminals</td>
<td>2,5 mm² - 250 VAC / 12 A</td>
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SEQENCER FOR DEDUSTING PLANTS

DESCRIPTION

Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

STANDARD FEATURES

- Minimum and maximum dP alarms on same relay (K2)
- Digital differential pressure control (STOP at cycle end)
- dP zero readout regulation
- dP full range $10.00 \text{kPa} = 100.0 \text{ mbar} = 1012 \text{ mmH2O}$.
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- Consent from external compressed air pressure switch
- ON/OFF cleaning cycle from external contact
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display
- Input and output voltage selection

OPTION ON REQUEST

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

TECHNICAL FEATURES

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage 230 VAC / 115 VAC
- Operating temperature -10 °C + + 50 °C
- No. Outputs 48 Solenoid valves Max
- Power requirement 10 VA (Stand-by)
- Protection degree IP65
- Material Metallic
- dP Control With internal trasducer
- Air connection P1 - P2 6x4 RILSAN pipe
- Terminals 2,5 mm² - 250 VAC / 12 A

II 3D Ex tc IIIc IP65 T100°C

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Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer.

**STANDARD FEATURES**

- Minimum and maximum dP alarms on same relay (K2)
- Digital differential pressure control (STOP at cycle end)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- Consent from external compressed air pressure switch
- ON/OFF cleaning cycle from external contact
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display
- Input and output voltage selection

**OPTION ON REQUEST**

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

**TECHNICAL FEATURES**

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage 230 VAC / 115 VAC
- Operating temperature - 10 °C + + 50 °C
- No. Outputs 96 Solenoid valves Max
- Power requirement 10 VA (Stand-by)
- Protection degree IP65
- Material Metallic
- dP Control With internal trasducer
- Air connection P1 - P2 6x4 RILSAN pipe
- Terminals 2,5 mm² - 250 VAC / 12 A

II 3D Ex tc IIC IP65 T100°C

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Electronic Control System for dust collectors

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Fax ++39 02 972 89 270
DESCRIPTION

Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer complete with electropilots.

STANDARD FEATURES

- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Air connections 6x4 RILSAN pipe
- Differential pressure digital control
- Differential pressure readout from internal transducer (max 10 kPa)
- Additional cycles after fan stop with fan mode selection.
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- ON/OFF Cleaning cycle from external contact.
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input / Output voltage selection.

OPTION ON REQUEST

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Precoating
- Tropicalisation of the Printed Circuit

TECHNICAL FEATURES

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<tr>
<th>Feature</th>
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<tr>
<td>Supply voltage on request:</td>
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<tr>
<td>Solenoid valves voltage</td>
<td>24 VDC</td>
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<td>Operating temperature</td>
<td>-10 °C + + 50 °C</td>
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<tr>
<td>Number electropilots</td>
<td>8 Max</td>
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<td>Power requirement</td>
<td>10 VA (Stand-by)</td>
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<tr>
<td>Protection degree</td>
<td>IP65</td>
</tr>
<tr>
<td>Material</td>
<td>ABS</td>
</tr>
<tr>
<td>dP Control</td>
<td>With internal trasducer</td>
</tr>
<tr>
<td>Terminal</td>
<td>6x4 RILSAN pipe</td>
</tr>
<tr>
<td>Terminals</td>
<td>2,5 mm² - 250 VAC / 12 A</td>
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</table>

II 3D Ex tc IIIIC IP65 T100°C
Ex22EB16 SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

Sequencer for dedusting plant cleaning cycle control with digital dP control by internal transducer complete with electropilots.

STANDARD FEATURES

- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Air connections 6x4 RILSAN pipe
- Differential pressure digital control
- Differential pressure readout from internal transducer (max 10 kPa)
- Additional cycles after fan stop with fan mode selection.
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- ON/OFF Cleaning cycle from external contact.
- Alarm relay contacts open
- Select Number of outputs
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input / Output voltage selection.

OPTION ON REQUEST

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Precoating
- Tropicalisation of the Printed Circuit

TECHNICAL FEATURES

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<td>Solenoid valves voltage</td>
<td>24 VDC</td>
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<tr>
<td>Operating temperature</td>
<td>-10°C ÷ +50°C</td>
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<tr>
<td>Number electropilots</td>
<td>16 Max</td>
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<td>Power requirement</td>
<td>10 VA (Stand-by)</td>
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<td>Protection degree</td>
<td>IP65</td>
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<td>Material</td>
<td>ABS</td>
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<td>With internal trasducer</td>
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<tr>
<td>Terminals</td>
<td>2,5 mm² - 250 VAC / 12 A</td>
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II 3D Ex tc IIIc IP65 T100°C

ESA Electronic Engineering s.r.l.

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Phone +39 02 972 89 899   Fax +39 02 972 89 270
SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION
Seqeuencer for dedusting plant cleaning cycle control without digital dP control with electropilots.

STANDARD FEATURES
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Relay Voltage ON (K1)
- ON/OFF Cleaning cycle from external contact.
- Additional cycles after fan stop
- ON/OFF cleaning cycle from external pressure switch
- Select Number of outputs
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input voltage selection

OPTION ON REQUEST
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit

TECHNICAL FEATURES
- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 24 VDC
- Operating temperature: -10 °C + + 50 °C
- Number electropilots: 8 Max
- Power requirement: 10 VA (Stand-by)
- 30 VA Max ev. ON
- Protection degree: IP65
- Material: ABS
- Terminals: 2,5 mm² - 250 VAC / 12 A
- II 3D Ex tc IIIC IP65 T100°C
SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION
Sequencer for dedusting plant cleaning cycle control without digital dP control with electropilots.

STANDARD FEATURES
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Relay Voltage ON (K1)
- ON/OFF Cleaning cycle from external contact.
- Additional cycles after fan stop
- ON/OFF cleaning cycle from external pressure switch
- Select Number of outputs
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input voltage selection

OPTION ON REQUEST
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit

TECHNICAL FEATURES
- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 24 VDC
- Operating temperature: -10 °C + +50 °C
- Number electropilots: 16 Max
- Power requirement: 10 VA (Stand-by)
- Protection degree: IP65
- Material: ABS
- Terminals: 2,5 mm² - 250 VAC / 12 A

II 3D Ex tc IIIC IP65 T100°C

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**SEQUENCER FOR DEDUSTING PLANTS**

**DESCRIPTION**

Sequencer for dedusting plant cleaning cycle control without digital dP.

**STANDARD FEATURES**

- Relay Voltage ON (K1)
- Autoselection of the number of the output
- Pulse time for each valve from 50 to 1000 ms.
- Interval time between two activation from 1 to 120 s.
- ON/OFF cleaning cycle from external pressure switch
- Additional cycles after fan stop
- Maximum load power 25W per output

**OPTION ON REQUEST**

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit

**TECHNICAL FEATURES**

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<tr>
<td>Solenoid valves voltage</td>
<td>230 VAC / 115 VAC</td>
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<tr>
<td>Operating temperature</td>
<td>-10 °C + +50 °C</td>
</tr>
<tr>
<td>No. Outputs</td>
<td>12 Solenoid valves Max</td>
</tr>
<tr>
<td>Power requirement</td>
<td>10 VA (Stand-by)</td>
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<tr>
<td>Protection degree</td>
<td>IP65</td>
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<tr>
<td>Material</td>
<td>Aluminium</td>
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<td>Terminals</td>
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Il 2D Ex tb III C T100°C Db IP65
Il 2G Ex e mb/Ex ib II C T5 Gb

**Electronic Control System for dust collectors**

**Contact Information**

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Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

Sequencer for dedusting plant cleaning cycle control without digital dP.

STANDARD FEATURES

- Relay Voltage ON (K1)
- Autoselection of the number of the output
- Pulse time for each valve from 50 to 1000 ms.
- Interval time between two activation from 1 to 120 s.
- ON/OFF cleaning cycle from external pressure switch
- Additional cycles after fan stop
- Maximum load power 25W per output

OPTION ON REQUEST

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit

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<td>Operating temperature</td>
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<td>No. Outputs</td>
<td>24 Solenoid valves Max</td>
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<td>30 VA Max ev. ON</td>
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Il 2D Ex tb IIIIC T100°C Db IP65
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DESCRIPTION

Sequencer for dedusting plant cleaning cycle control without digital dP.

STANDARD FEATURES

- Relay Voltage ON (K1)
- Autoselection of the number of the output
- Pulse time for each valve from 50 to 1000 ms.
- Interval time between two activation from 1 to 120 s.
- ON/OFF cleaning cycle from external pressure switch
- Additional cycles after fan stop
- Maximum load power 25W per output
- Input / Output voltage selection.

OPTION ON REQUEST

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit

TECHNICAL FEATURES

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Operating temperature: -10 °C + + 50 °C
- No. Outputs: 12 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Protection degree: IP65
- Material: ABS
- Terminals: 2,5 mm² - 250 VAC / 12 A

II 3D Ex tc IIIC IP65 T100°C

ESA Electronic Engineering s.r.l.
Electronic Control System for dust collectors

info@esaecomputer.it  www.esaecomputer.it
Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

Sequencer for dedusting plant cleaning cycle control without digital dP.

STANDARD FEATURES

- Relay Voltage ON (K1)
- Autoselection of the number of the output
- Pulse time for each valve from 50 to 1000 ms.
- Interval time between two activation from 1 to 120 s.
- ON/OFF cleaning cycle from external pressure switch
- Additional cycles after fan stop
- Maximum load power 25W per output
- Input / Output voltage selection.

OPTION ON REQUEST

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit

TECHNICAL FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Standard supply voltage</td>
<td>230 VAC / 115 VAC</td>
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<tr>
<td>Supply voltage on request</td>
<td>24 VAC / 24 VDC</td>
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<tr>
<td>Solenoid valves voltage</td>
<td>230 VAC / 115 VAC (or 24 VAC / 24 VDC)</td>
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<tr>
<td>Operating temperature</td>
<td>-10°C to +50°C</td>
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<tr>
<td>No. Outputs</td>
<td>24 Solenoid valves Max</td>
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<td>10 VA (Stand-by)</td>
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<td>Protection degree</td>
<td>IP65</td>
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<tr>
<td>Material</td>
<td>ABS</td>
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<tr>
<td>Terminals</td>
<td>2.5 mm² - 250 VAC / 12 A</td>
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II 3D Ex tc IIIC IP65 T100°C

ESA Electronic Engineering s.r.l.
Electronic Control System for dust collectors

info@esaelectronic.it
Phone ++39 02 972 89 899
Fax ++39 02 972 89 270

www.esaelectronic.it
**DESCRIPTION**

Sequencer for dedusting plant cleaning cycle control without digital dP.

**STANDARD FEATURES**

- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- ON/OFF Cleaning cycle from external contact.
- ON/OFF cleaning cycle from external pressure switch
- Additional cycles after fan stop
- Select Number of outputs
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input / Output voltage selection.

**OPTION ON REQUEST**

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit

**TECHNICAL FEATURES**

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<td>230 VAC / 115 VAC</td>
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<td></td>
<td>24 VAC / 24 VDC</td>
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<td>-10 °C to +50 °C</td>
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<td>No. Outputs</td>
<td>8 Solenoid valves Max</td>
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<td>10 VA (Stand-by)</td>
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<td>30 VA Max ev. ON</td>
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<td>Material</td>
<td>ABS</td>
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<tr>
<td>Terminals</td>
<td>2,5 mm² - 250 VAC / 12 A</td>
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</tbody>
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**II 3D Ex tc IIIC IP65 T100°C**

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Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
**DESCRIPTION**

Sequencer for dedusting plant cleaning cycle control without digital dP.

**STANDARD FEATURES**

- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- ON/OFF Cleaning cycle from external contact.
- ON/OFF cleaning cycle from external pressure switch
- Additional cycles after fan stop
- Select Number of outputs
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input / Output voltage selection.

**OPTION ON REQUEST**

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit

**TECHNICAL FEATURES**

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<td>24 VAC / 24 VDC</td>
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<tr>
<td>Operating temperature</td>
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<tr>
<td>No. Outputs</td>
<td>16 Solenoid valves Max</td>
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<td>10 VA (Stand-by)</td>
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<td>30 VA Max ev. ON</td>
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<td>ABS</td>
</tr>
<tr>
<td>Terminals</td>
<td>2,5 mm² - 250 VAC / 12 A</td>
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II 3D Ex tc IIC IP65 T100°C

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**ESA Electronic Engineering s.r.l.**

Electronic Control System for dust collectors

info@esaelectronic.it  www.esaelectronic.it
Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION
Sequencer for dedusting plant cleaning cycle control without digital dp.

STANDARD FEATURES
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- ON/OFF Cleaning cycle from external contact.
- ON/OFF cleaning cycle from external pressure switch
- Additional cycles after fan stop
- Select Number of outputs
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input / Output voltage selection.

OPTION ON REQUEST
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit

TECHNICAL FEATURES

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<td>Solenoid valves voltage</td>
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<td>Operating temperature</td>
<td>-10 °C to +50 °C</td>
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<tr>
<td>No. Outputs</td>
<td>32 Solenoid valves Max</td>
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<tr>
<td>Power requirement</td>
<td>10 VA (Stand-by)</td>
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<td>Protection degree</td>
<td>IP65</td>
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<tr>
<td>Material</td>
<td>PS Thermoplastish</td>
</tr>
<tr>
<td>Terminals</td>
<td>2.5 mm² - 250 VAC / 12 A</td>
</tr>
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</table>

II 3D Ex tc IIIC IP65 T100°C
SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

Sequencer for dedusting plant cleaning cycle control without digital dP.

STANDARD FEATURES

- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- ON/OFF Cleaning cycle from external contact.
- ON/OFF cleaning cycle from external pressure switch
- Additional cycles after fan stop
- Select Number of outputs
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input / Output voltage selection.

OPTION ON REQUEST

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit

TECHNICAL FEATURES

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<td>230 VAC / 115 VAC</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-10 °C to +50 °C</td>
</tr>
<tr>
<td>No. Outputs</td>
<td>48 Solenoid valves Max</td>
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<tr>
<td>Power requirement</td>
<td>10 VA (Stand-by)</td>
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<td>Protection degree</td>
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<tr>
<td>Material</td>
<td>PS Thermoplastish</td>
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<tr>
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Il 3D Ex tc IIIC IP65 T100°C

ESA Electronic Engineering s.r.l.
Electronic Control System for dust collectors

info@esaelectronic.it  www.esaelectronic.it
Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
Sequencer for dedusting plant cleaning cycle control without digital dP.

### STANDARD FEATURES

- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Relay Voltage ON (K1)
- ON/OFF Cleaning cycle from external contact.
- Additional cycles after fan stop
- ON/OFF cleaning cycle from external pressure switch
- Select Number of outputs
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input / Output voltage selection.

### OPTION ON REQUEST

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit
- Keypad lock

### TECHNICAL FEATURES

<table>
<thead>
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<th>Feature</th>
<th>Details</th>
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<tr>
<td>Standard supply voltage</td>
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<tr>
<td>Supply voltage on request</td>
<td>24 VAC / 24 VDC</td>
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<tr>
<td>Solenoid valves voltage</td>
<td>230 VAC / 115 VAC</td>
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<td>Operating temperature</td>
<td>-10 °C + + 50 °C</td>
</tr>
<tr>
<td>No. Outputs</td>
<td>20 Solenoid valves Max</td>
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<td>Material</td>
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</tr>
<tr>
<td>Terminals</td>
<td>2.5 mm² - 250 VAC / 12 A</td>
</tr>
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Il 3D Ex tc IIIC IP65 T100°C

**ESA Electronic Engineering s.r.l.**

Electronic Control System for dust collectors

info@esaelectronic.it  www.esaelectronic.it
Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
Sequencer for dedusting plant cleaning cycle control without digital dP.

STANDARD FEATURES

- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Relay Voltage ON (K1)
- ON/OFF Cleaning cycle from external contact.
- Additional cycles after fan stop
- ON/OFF cleaning cycle from external pressure switch
- Select Number of outputs
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input activation from external contacts
- Input / Output voltage selection.

OPTION ON REQUEST

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit
- Keypad lock

TECHNICAL FEATURES

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Operating temperature: -10 °C + + 50 °C
- No. Outputs: 36 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Protection degree: IP65
- Material: PS Thermoplastish
- Terminals: 2,5 mm² - 250 VAC / 12 A

II 3D Ex tc IIIC IP65 T100°C

Electronic Control System for dust collectors

info@esaelectronic.it    www.esaelectronic.it
Phone ++39 02 972 89 899     Fax ++39 02 972 89 270
**EX22SB16 SEQUENCER FOR DEDUSTING PLANTS**

**DESCRIPTION**

Sequencer for dedusting plant cleaning cycle control without digital dP.

**STANDARD FEATURES**

- Cleaning cycle
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- ON/OFF cleaning cycle from external pressure switch. STOP at the end of the cycle
- ON/OFF cleaning cycle from external contact
- Additional cycles from voltfree contact. ALWAYS enabled.
- Select Number of outputs
- Input activation from external contacts
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input and output voltage selection

**OPTION ON REQUEST**

- Metric Cable Glands. Type and Qnty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit
- 4÷20 mA output signal of TC probe readout
- Keypad lock

**TECHNICAL FEATURES**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Standard supply voltage:</td>
<td>230 VAC / 115 VAC</td>
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<tr>
<td>Supply voltage on request:</td>
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<tr>
<td>Solenoid valves voltage</td>
<td>230 VAC / 115 VAC</td>
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<td></td>
<td>24 VAC / 24 VDC</td>
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<tr>
<td>Operating temperature</td>
<td>-10 °C + + 50 °C</td>
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<tr>
<td>No. Outputs</td>
<td>16 Solenoid valves Max</td>
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<td>30 VA Max ev. ON</td>
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<td>Material</td>
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SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

Sequencer for dedusting plant cleaning cycle control without digital dP.

STANDARD FEATURES

- Cleaning cycle
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- ON/OFF cleaning cycle from external pressure switch. STOP at the end of the cycle
- ON/OFF cleaning cycle from external contact
- Additional cycles from voltfree contact. ALWAYS enabled.
- Select Number of outputs
- Input activation from external contacts
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input and output voltage selection

OPTION ON REQUEST

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit
- 4÷20 mA output signal of TC probe readout
- Keypad lock

TECHNICAL FEATURES

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Operating temperature: -10 °C + + 50 °C
- No. Outputs: 32 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Protection degree: IP65
- Material: ABS
- Terminals: 2.5 mm² - 250 VAC / 12 A

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SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION
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STANDARD FEATURES
- Cleaning cycle
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- ON/OFF cleaning cycle from external pressure switch. STOP at the end of the cycle
- ON/OFF cleaning cycle from external contact
- Additional cycles from voltfree contact. ALWAYS enabled.
- Select Number of outputs
- Input activation from external contacts
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input and output voltage selection

OPTION ON REQUEST
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
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- 4÷20 mA output signal of TC probe readout
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<td>Solenoid valves voltage</td>
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Il 3D Ex tc IIIC IP65 T100°C

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**SEQUENCER FOR DEDUSTING PLANTS**

**DESCRIPTION**

Sequencer for dedusting plant cleaning cycle control without digital dP.

**STANDARD FEATURES**

- Cleaning cycle
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- ON/OFF cleaning cycle from external pressure switch. STOP at the end of the cycle
- ON/OFF cleaning cycle from external contact
- Additional cycles fromvoltfree contact. ALWAYS enabled.
- Select Number of outputs
- Input activation from external contacts
- Short-circuit protection of every single output
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Input and output voltage selection

**OPTION ON REQUEST**

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit
- 4÷20 mA output signal of TC probe readout
- Keypad lock

**TECHNICAL FEATURES**

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Operating temperature: -10 °C + + 50 °C
- No. Outputs: 96 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Maximum load power: 25VA Max ev. ON
- Protection degree: IP65
- Material: Metallic
- Terminals: 2.5 mm² - 250 VAC / 12 A

II 3D Ex tc IIIC IP65 T100°C

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Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
DESCRIPTION

Sequencer for dedusting plant cleaning cycle control without digital dP.

STANDARD FEATURES

✓ Activation time from 0.05 to 5.00 sec.
✓ Interval time from 1 to 999 sec.
✓ Interval time between ev. during post-cleaning
✓ Cleaning cycle
✓ Relay Voltage ON (K1)
✓ ON/OFF cleaning cycle from external contact
✓ Additional cycles from voltfree contact. ALWAYS enabled.
✓ ON/OFF cleaning cycle from external pressure switch. STOP at the end of the cycle
✓ Short-circuit protection of every single output
✓ Input activation from external contacts
✓ Operation hours-counter
✓ Manual activation of every single output from keyboard
✓ Maximum load power 25W per output
✓ Multi language display

OPTION ON REQUEST

✓ Metric Cable Glands. Type and Q.ty on request.
✓ Other Enclosures available on request.
✓ Relay K1 Cycle ON / OFF contact. Closed with active cycle
✓ Tropicalisation of the Printed Circuit
✓ 4÷20 mA output signal of TC probe readout
✓ Keypad lock

TECHNICAL FEATURES

Standard supply voltage: 230 VAC / 115 VAC
Supply voltage on request: 24 VAC / 24 VDC
Solenoid valves voltage: 230 VAC / 115 VAC
24 VAC / 24 VDC
Operating temperature: - 10 °C + + 40 °C
No. Outputs: 48 Solenoid valves Max
Power requirement: 10 VA (Stand-by)
30 VA Max ev. ON
Protection degree: IP65
Material: Metallic
Terminals: 2,5 mm² - 250 VAC / 12 A

Il 2D Ex tb IIIIC T100°C Db IP66
Il 2G Ex d IIB T5 Gb

ESA Electronic Engineering s.r.l.
Electronic Control System for dust collectors

info@esaelectronic.it www.esaelectronic.it
Phone ++39 02 972 89 899 Fax ++39 02 972 89 270
Sequencer for dedusting plant cleaning cycle control without digital dP.

**STANDARD FEATURES**

- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Cleaning cycle
- Relay Voltage ON (K1)
- ON/OFF cleaning cycle from external contact
- Additional cycles from voltfree contact. ALWAYS enabled.
- ON/OFF cleaning cycle from external pressure switch. STOP at the end of the cycle
- Short-circuit protection of every single output
- Input activation from external contacts
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display

**OPTION ON REQUEST**

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit
- 4÷20 mA output signal of TC probe readout
- Keypad lock

**TECHNICAL FEATURES**

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Operating temperature: -10 °C + + 50 °C
- No. Outputs: 16 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Protection degree: IP65
- Material: Aluminium
- Terminals: 2,5 mm² - 250 VAC / 12 A

Il 2D Ex tb IIIC T100°C Db IP65
Il 2G Ex e mb/Ex ib llC T5 Gb

**Electronic Control System for dust collectors**

[Contact Information]
SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

Sequencer for dedusting plant cleaning cycle control without digital dP.

STANDARD FEATURES

- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Cleaning cycle
- Relay Voltage ON (K1)
- ON/OFF cleaning cycle from external contact
- Additional cycles from voltfree contact. ALWAYS enabled.
- ON/OFF cleaning cycle from external pressure switch. STOP at the end of the cycle
- Short-circuit protection of every single output
- Input activation from external contacts
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display

OPTION ON REQUEST

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit
- 4÷20 mA output signal of TC probe readout
- Keypad lock

TECHNICAL FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard supply voltage</td>
<td>230 VAC / 115 VAC</td>
</tr>
<tr>
<td>Supply voltage on request</td>
<td>24 VAC / 24 VDC</td>
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<td>Solenoid valves voltage</td>
<td>230 VAC / 115 VAC</td>
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<tr>
<td>Operating temperature</td>
<td>-10 °C + + 50 °C</td>
</tr>
<tr>
<td>No. Outputs</td>
<td>48 Solenoid valves Max</td>
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<tr>
<td>Power requirement</td>
<td>10 VA (Stand-by)</td>
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<tr>
<td>Protection degree</td>
<td>30 VA Max ev. ON</td>
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<td>Material</td>
<td>Aluminium</td>
</tr>
<tr>
<td>Terminals</td>
<td>2.5 mm² - 250 VAC / 12 A</td>
</tr>
</tbody>
</table>

Il 2D Ex tb IIIC T100°C Db IP65
II 2G Ex e mb/Ex ib IIIC T5 Gb

ESA Electronic Engineering s.r.l.
Electronic Control System for dust collectors

info@esaelectronic.it
www.esaelectronic.it
Phone ++39 02 972 89 899
Fax ++39 02 972 89 270
SEQUCENER FOR DEDUSTING PLANTS

DESCRIPTION
Sequencer for dedusting plant cleaning cycle control without digital dP.

STANDARD FEATURES
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Cleaning cycle
- Relay Voltage ON (K1)
- ON/OFF cleaning cycle from external contact
- Additional cycles from voltfree contact. ALWAYS enabled.
- ON/OFF cleaning cycle from external pressure switch. STOP at the end of the cycle
- Short-circuit protection of every single output
- Input activation from external contacts
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display

OPTION ON REQUEST
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit
- 4÷20 mA output signal of TC probe readout
- Keypad lock

TECHNICAL FEATURES

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Operating temperature: -10 °C + + 40 °C
- No. Outputs: 48 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Protection degree: IP65
- Material: Metallic
- Terminals: 2.5 mm² - 250 VAC / 12 A

II 2D Ex tb IIC T100°C Db IP66

ESA Electronic Engineering s.r.l.
Electronic Control System for dust collectors

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Phone ++39 02 972 89 899     Fax ++39 02 972 89 270
**SEQUENCER FOR DEDUSTING PLANTS**

**DESCRIPTION**

Sequencer for dedusting plant cleaning cycle control without digital dP.

**STANDARD FEATURES**

- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Cleaning cycle
- Relay Voltage ON (K1)
- ON/OFF cleaning cycle from external contact
- Additional cycles from voltfree contact. ALWAYS enabled.
- ON/OFF cleaning cycle from external pressure switch. STOP at the end of the cycle
- Short-circuit protection of every single output
- Input activation from external contacts
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display
- Input and output voltage selection

**OPTION ON REQUEST**

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit
- 4÷20 mA output signal of TC probe readout
- Keypad lock

**TECHNICAL FEATURES**

- **Standard supply voltage:** 230 VAC / 115 VAC
- **Supply voltage on request:** 24 VAC / 24 VDC
- **Solenoid valves voltage:** 230 VAC / 115 VAC
- **Operating temperature:** -10 °C + + 50 °C
- **No. Outputs:** 16 Solenoid valves Max
- **Power requirement:** 10 VA (Stand-by) 30 VA Max ev. ON
- **Protection degree:** IP65
- **Material:** ABS
- **Terminals:** 2,5 mm² - 250 VAC / 12 A

II 3D Ex tc IIC IP65 T100°C

**ESA Electronic Engineering s.r.l.**

Electronic Control System for dust collectors

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Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
Sequencer for dedusting plant cleaning cycle control without digital dP.

**STANDARD FEATURES**
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Cleaning cycle
- Relay Voltage ON (K1)
- ON/OFF cleaning cycle from external contact
- Additional cycles from voltfree contact. ALWAYS enabled.
- ON/OFF cleaning cycle from external pressure switch. STOP at the end of the cycle
- Short-circuit protection of every single output
- Input activation from external contacts
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display
- Input and output voltage selection

**OPTION ON REQUEST**
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit
- 4÷20 mA output signal of TC probe readout
- Keypad lock

**TECHNICAL FEATURES**
- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 230 VAC / 115 VAC
- Operating temperature: -10 °C + + 50 °C
- No. Outputs: 32 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
- Protection degree: IP65
- Material: ABS
- Terminals: 2.5 mm² - 250 VAC / 12 A

II 3D Ex tc IIIC IP65 T100°C

**Electronic Control System for dust collectors**

ESA Electronic Engineering s.r.l.

info@esaelectronic.it  www.esaelectronic.it
Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
EX22SC48 SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

Sequencer for dedusting plant cleaning cycle control without digital dP.

STANDARD FEATURES

- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Cleaning cycle
- Relay Voltage ON (K1)
- ON/OFF cleaning cycle from external contact
- Additional cycles from voltfree contact. ALWAYS enabled.
- ON/OFF cleaning cycle from external pressure switch. STOP at the end of the cycle
- Short-circuit protection of every single output
- Input activation from external contacts
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display
- Input and output voltage selection

OPTION ON REQUEST

- Metric Cable Glands. Type and Q.ty on request.
- Other Endencures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit
- 4÷20 mA output signal of TC probe readout
- Keypad lock

TECHNICAL FEATURES

<table>
<thead>
<tr>
<th></th>
<th>Standard supply voltage: 230 VAC / 115 VAC</th>
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<tbody>
<tr>
<td>Supply voltage on request:</td>
<td>24 VAC / 24 VDC</td>
</tr>
<tr>
<td>Solenoid valves voltage:</td>
<td>230 VAC / 115 VAC</td>
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<tr>
<td></td>
<td>24 VAC / 24 VDC</td>
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<tr>
<td>Operating temperature:</td>
<td>-10 °C + + 50 °C</td>
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<tr>
<td>No. Outputs:</td>
<td>48 Solenoid valves Max</td>
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<td>Power requirement:</td>
<td>10 VA (Stand-by)</td>
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<td></td>
<td>30 VA Max ev. ON</td>
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<td>Protection degree:</td>
<td>IP65</td>
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<td>Material:</td>
<td>ABS</td>
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<tr>
<td>Terminals:</td>
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</tr>
</tbody>
</table>

II 3D Ex tc IIIC IP65 T100°C

ESA Electronic Engineering s.r.l.
Electronic Control System for dust collectors

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Phone +39 02 972 89 899  Fax +39 02 972 89 270
SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

Sequencer for dedusting plant cleaning cycle control without digital dP.

STANDARD FEATURES

- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Cleaning cycle
- Relay Voltage ON (K1)
- ON/OFF cleaning cycle from external contact
- Additional cycles from voltfree contact. ALWAYS enabled.
- ON/OFF cleaning cycle from external pressure switch. STOP at the end of the cycle
- Short-circuit protection of every single output
- Input activation from external contacts
- Operation hours-counter
- Manual activation of every single output from keyboard
- Maximum load power 25W per output
- Multi language display
- Input and output voltage selection

OPTION ON REQUEST

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Relay K1 Cycle ON / OFF contact. Closed with active cycle
- Tropicalisation of the Printed Circuit
- 4÷20 mA output signal of TC probe readout
- Keypad lock

TECHNICAL FEATURES

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<tbody>
<tr>
<td>Standard supply voltage:</td>
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</tr>
<tr>
<td></td>
<td>24 VAC / 24 VDC</td>
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<td>Operating temperature</td>
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<tr>
<td>No. Outputs</td>
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<td>Power requirement</td>
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<td></td>
<td>30 VA Max ev. ON</td>
</tr>
<tr>
<td>Protection degree</td>
<td>IP65</td>
</tr>
<tr>
<td>Material</td>
<td>Metallic</td>
</tr>
<tr>
<td>Terminals</td>
<td>2.5 mm² - 250 VAC / 12 A</td>
</tr>
</tbody>
</table>

II 3D Ex tc IIIC IP65 T100°C

Electronic Control System for dust collectors

ESA Electronic Engineering s.r.l.

info@esaelectronic.it   www.esaelectronic.it
Phone ++39 02 972 89 899   Fax ++39 02 972 89 270
**DESCRIPTION**
Digital differential pressure controller between two points.

**STANDARD FEATURES**
✓ Differential pressure readout from internal transducer (max 10 kPa)
✓ Minimum (K2) and maximum (K1) dP alarms on separate relays
✓ dP zero readout regulation
✓ dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
✓ 4÷20 mA output signal of dP readout
✓ Air connections 6x4 RILSAN pipe
✓ Input voltage selection

**OPTION ON REQUEST**
✓ Metric Cable Glands. Type and Q.ty on request.
✓ Other Enclosures available on request.
✓ Tropicalisation of the Printed Circuit

**TECHNICAL FEATURES**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Standard supply voltage:</td>
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<td>Supply voltage on request:</td>
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</tr>
<tr>
<td>Operating temperature</td>
<td>-10 °C ÷ +50 °C</td>
</tr>
<tr>
<td>Power requirement</td>
<td>&lt; 5 VA</td>
</tr>
<tr>
<td>Protection degree</td>
<td>IP65</td>
</tr>
<tr>
<td>Material</td>
<td>ABS</td>
</tr>
<tr>
<td>dP Control</td>
<td>With internal trasducer</td>
</tr>
<tr>
<td>Air connection P1 - P2</td>
<td>6x4 RILSAN pipe</td>
</tr>
<tr>
<td>Terminals</td>
<td>2.5 mm² - 250 VAC / 12 A</td>
</tr>
</tbody>
</table>

II 3D Ex tc IIIC IP65 T100°C

**ESA Electronic Engineering s.r.l.**
Electronic Control System for dust collectors

info@esaelectronic.it  www.esaelectronic.it
Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
**DIGITAL DIFFERENTIAL PRESSURE**

**DESCRIPTION**

Digital differential pressure controller between two points.

**STANDARD FEATURES**

- Minimum (K1) and maximum (K2) dP alarms on separate relays
- Differential pressure readout from internal transducer (max 10 kPa)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- 4÷20 mA output signal of dP readout
- Operation hours-counter
- Air connections 6x4 RILSAN pipe
- Multi language display
- Input voltage selection

**OPTION ON REQUEST**

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Tropicalisation of the Printecd Circuit
- RS485 serial line connection
- Keypad lock

**TECHNICAL FEATURES**

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Operating temperature: -10 °C + + 50 °C
- Power requirement: < 5 VA
- Protection degree: IP65
- Material: ABS
- dP Control: With internal trasducer
- Air connection P1 - P2: 6x4 RILSAN pipe
- Terminals: 2,5 mm² - 250 VAC / 12 A

**II 3D Ex tc IIIC IP65 T100°C**

**Electronic Control System for dust collectors**

info@esaelectronic.it  www.esaelectronic.it
Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
TP10 is a differential pressure transducer used to be connected to various instruments, PLC or ESA sequencer with dP digital control and dP reader.

When the distance between the pneumatic signal plugs and the equipment is very long, it is advisable to install the TP10 near the connections of the pneumatic signal and move the 4÷20mA electric signal far from it.

The metallic housing made of aluminium, allows its use also in a degraded environment.

The standard output is a 2-wire 4÷20 mA output therefore the use of this kind of transducer is envisaged as instrument generating the power supply voltage.

**STANDARD FEATURES**

- Air connections 6x4 RILSAN pipe
- M16 Cable gland

**OPTION ON REQUEST**

- dP full range 1 kPa
- dP full range 3 kPa
- dP full range 5 kPa
- dP full range 7 kPa
- Other units of measurement (mbar, mmH2O, inchH2O)
- Tropicalisation of the Printed Circuit
- Filtered connections

**TECHNICAL FEATURES**

- Supply Voltage: See wiring Diagram
- Max dP between P1 and P2: 0 ÷ 10 kPa
- Standard range (10 kPa): 0 ÷ 10 kPa
- Operating temperature: -10 °C ÷ +50 °C
- Linearity: ± 1%
- Protection degree: IP65
- Material: Aluminium
- dP Control: With internal trasducer
- Air connection P1 - P2: 6x4 RILSAN pipe
- Terminals: 2.5 mm² - 250 VAC / 12 A

**II 3D Ex tc IIIC IP65 T100°C**
**EX22DTC DUST EMISSIONS MONITORING**

**DESCRIPTION**

Device designed to show and check the signal from Tribo-Electric probe to measure the quantity of dust in a duct with gas

**STANDARD FEATURES**

- Emission control by TRIBO-CHECK probe.
- High emission alarm threshold. Contact open with alarm. Automatic reset
- TC probe readout zero regulation (-9÷+9 points)
- Emission readout setup in mg/m3
- TC probe signal readout in mA
- Multi language display

**OPTION ON REQUEST**

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Tropicalisation of the Printed Circuit
- Keypad lock

**TECHNICAL FEATURES**

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Operating temperature: -10 °C + +50 °C
- Power requirement: < 5 VA
- Protection degree: IP65
- Material: ABS
- Terminals: 2.5 mm² - 250 VAC / 12 A

**II 3D Ex tc IIIC IP65 T100°C**
**DESCRIPTION**

Device designed to show and check the signal from Tribo-Electric probe to measure the quantity of dust in a duct with gas. Digital differential pressure controller between two points.

**STANDARD FEATURES**

- Emission control by TRIBO-CHECK probe.
- TC probe readout zero regulation (-9÷+9 points)
- Emission readout setup in mg/m3
- TC probe signal readout in mA
- Multi language display
- Minimum and maximum dP alarms on same relay (K1)
- Differential pressure readout from internal transducer (max 10 kPa)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Air connections 6x4 RILSAN pipe
- Operation hours-counter
- Input voltage selection
- Alarm relay contacts open

**OPTION ON REQUEST**

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Tropicalisation of the Printed Circuit
- Keypad lock

**TECHNICAL FEATURES**

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<tr>
<td>Supply voltage on request</td>
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<tr>
<td>Material</td>
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<tr>
<td>dP Control</td>
<td>With internal trasducer</td>
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<tr>
<td>Air connection P1 - P2</td>
<td>6x4 RILSAN pipe</td>
</tr>
<tr>
<td>Terminals</td>
<td>2,5 mm² - 250 VAC / 12 A</td>
</tr>
</tbody>
</table>

II 3D Ex tc IIIC IP65 T100°C
DESCRIPTION

The need to signal in advance possible leakages of the dedusting system avoiding high costs of environmental reclamation and of plants stop-overs brought, since a long time, to the use of electronic equipments dedicated to a better environmental safeguard. With the use of these devices it is possible to signal any failure that can produce dangerous emissions in the atmosphere which are symptom of breakdown in the dedusting plant. Especially, it is possible to control any breaks of the filtering surfaces, broken bags or cartridges.

The use of TC probes allows therefore to identify the dust particles which are present in the gases that go through the filter due to any breaks or failures of the bags or cartridges where the quantities of dusts to remark are considerable 100÷400 mg.

For a correct functioning of the TC probe, the cartridges or the bags must be mounted in a vertical position.

The TC probe is seldom used for the continuous monitoring of the dustiness degree present in the discharge duct of the gases in the atmosphere.

The above-mentioned use entails a more complicated calibration and a deep knowledge of the device.

The TC probe notes the passage of particles which are present in the gases by turning this physical phenomenon into an electric signal 4÷20 mA proportional to the dustiness degree.

A rotary switch located inside the head of the probe (SW 21) allows to change the amplification of the exit signal in order to permit a correct use of the TC probe in the most part of the dedusting systems.

The output signal (4÷20 mA) can be adjusted to program the activation of any alarms when the dust emissions overtake the values which have been set according to the law restrictions.

TECHNICAL FEATURES

- Supply Voltage: 16 ÷ 24 VDC / 100 mA
- Output signal: 4 ÷ 20 mA
- GAS temperature: 200 °C
- Operating temperature: -10 °C + +50 °C
- Relative humidity: 80 %
- Particle Size: >= 0.3 µm
- Rod length in mm. (*A): 500
- Other length available (*A): 100, 150, 200, 250 mm, 300, 350, 400, 500 mm, 600, 800, 1000, 1500 mm

STANDARD FEATURES

- TC standard probe fastening bush
- Tropicalisation of the Printed Circuit
- Exd M20 Cable gland

OPTION ON REQUEST

- High-sensitivity TC probe
- GAS temperature 200°C with BS200 (On Request)
EMISSION CONTROL PROBE  Tribo-Check® 4÷20 mA

DESCRIPTION

The need to signal in advance possible leakages of the dedusting system avoiding high costs of environmental reclamation and of plants stop-overs brought, since a long time, to the use of electronic equipments dedicated to a better environmental safeguard. With the use of these devices it is possible to signal any failure that can produce dangerous emissions in the atmosphere which are symptom of breakdown in the dedusting plant. Especially, it is possible to control any breaks of the filtering surfaces, broken bags or cartridges.

The use of TC probes allows therefore to identify the dust particles which are present in the gases that go through the filter due to any breaks or failures of the bags or cartridges where the quantities of dusts to remark are considerable 100÷400 mg.

For a correct functioning of the TC probe, the cartridges or the bags must be mounted in a vertical position.

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A rotary switch located inside the head of the probe (SW 21) allows to change the amplification of the exit signal in order to permit a correct use of the TC probe in the most part of the dedusting systems.

The output signal (4÷20 mA) can be adjusted to program the activation of any alarms when the dust emissions overtake the values which have been set according to the law restrictions.

TECHNICAL FEATURES

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<tr>
<th>Feature</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Supply Voltage</td>
<td>16 ÷ 24 VDC / 100 mA</td>
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<tr>
<td>Output signal</td>
<td>4 ÷ 20 mA</td>
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<tr>
<td>GAS temperature</td>
<td>200 °C</td>
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<tr>
<td>Operating temperature</td>
<td>-10 °C ÷ +50 °C</td>
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<tr>
<td>Relative humidity</td>
<td>80 %</td>
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<tr>
<td>Particle Size</td>
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<tr>
<td>Rod length in mm. (*)A</td>
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<td>Other length available (*)A</td>
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<td>300, 350, 400, 500 mm</td>
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<td>600, 800, 1000, 1500 mm</td>
</tr>
<tr>
<td>GAS temperature 200°C with BS200</td>
<td>(On Request)</td>
</tr>
</tbody>
</table>

STANDARD FEATURES

- TC standard probe fastening bush
- Tropicalisation of the Printed Circuit
- Exd M20 Cable gland

OPTION ON REQUEST

- High-sensitivity TC probe
- GAS temperature 200°C with BS200 (On Request)
EMISSION CONTROL PROBE  Tribo-Check® with relay

DESCRIPTION

The need to signal in advance possible leakages of the dedusting system avoiding high costs of environmental reclamation and of plants stop-overs brought, since a long time, to the use of electronic equipments dedicated to a better environmental safeguard. With the use of these devices it is possible to signal any failure that can produce dangerous emissions in the atmosphere which are symptom of breakdown in the dedusting plant. Especially, it is possible to control any breaks of the filtering surfaces, broken bags or cartridges.

The use of TC probes allows therefore to identify the dust particles which are present in the gases that go through the filter due to any breaks or failures of the bags or cartridges where the quantities of dusts to remark are considerable 100÷400 mg.

For a correct functioning of the TC probe, the cartridges or the bags must be mounted in a vertical position.

The TC probe is seldom used for the continuous monitoring of the dustiness degree present in the discharge duct of the gases in the atmosphere.

The above-mentioned use entails a more complicated calibration and a deep knowledge of the device.

The TC probe notes the passage of particles which are present in the gases by turning this physical phenomenon into an electric signal proportional to the dustiness degree.

By comparing the signal generated by TC with a threshold set by the rotary switch located inside the head of the probe (SW 21), it is possible to activate an alarm.

A relay output contact is available to manage the alarm.

TECHNICAL FEATURES

Supply Voltage 16 ÷ 24 VDC / 100 mA
Output signal Contact SPDT 1A / 40 V Max
GAS temperature 120°C with BS40 (Standard)
Operating temperature - 10 °C ÷ + 50 °C
Relative humidity 80 %
Particle Size >= 0.3 µm
Rod length in mm. 500 (Standard)
Other length available (*A) 100, 150, 200, 250 mm
300, 350, 400, 500 mm
600, 800, 1000, 1500 mm

STANDARD FEATURES

- TC standard probe fastening bush
- Tropicalisation of the Printed Circuit
- Exd M20 Cable gland

OPTION ON REQUEST

- GAS temperature 200°C with BS200 (On Request)

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Electronic Control System for dust collectors

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EMISSION CONTROL PROBE  Tribo-Check® with relay

DESCRIPTION

The need to signal in advance possible leakages of the dedusting system avoiding high costs of environmental reclamation and of plants stop-overs brought, since a long time, to the use of electronic equipments dedicated to a better environmental safeguard. With the use of these devices it is possible to signal any failure that can produce dangerous emissions in the atmosphere which are symptom of breakdown in the dedusting plant. Especially, it is possible to control any breaks of the filtering surfaces, broken bags or cartridges.

The use of TC probes allows therefore to identify the dust particles which are present in the gases that go through the filter due to any breaks or failures of the bags or cartridges where the quantities of dusts to remark are considerable 100÷400 mg.

For a correct functioning of the TC probe, the cartridges or the bags must be mounted in a vertical position.

The TC probe is seldom used for the continuous monitoring of the dustiness degree present in the discharge duct of the gases in the atmosphere.

The above-mentioned use entails a more complicated calibration and a deep knowledge of the device.

The TC probe notes the passage of particles which are present in the gases by turning this physical phenomenon into an electric signal proportional to the dustiness degree.

By comparing the signal generated by TC with a threshold set by the rotary switch located inside the head of the probe (SW 21), it is possible to activate an alarm.

A relay output contact is available to manage the alarm.

TECHNICAL FEATURES

- Supply Voltage: 16 ÷ 24 VDC / 100 mA
- Output signal: Contact SPDT 1A / 40 V Max
- GAS temperature: 120°C with BS40 (Standard)
- Operating temperature: -10 °C ± + 50 °C
- Relative humidity: 80 %
- Particle Size: >= 0.3 μm
- Rod length in mm: 500 (Standard)
- Other length available (*A): 100, 150, 200, 250 mm
- 300, 350, 400, 500 mm
- 600, 800, 1000, 1500 mm

STANDARD FEATURES

- TC standard probe fastening bush
- Tropicalisation of the Printed Circuit
- Brass/nickel cable glands M20

OPTION ON REQUEST

- High-sensitivity TC probe
- GAS temperature 200°C with BS200 (On Request)

Electronic Control System for dust collectors

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Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
**EX22DFC** PRESSURE STABILIZER FOR THE COLLECTORS WITH SUCTION

**DESCRIPTION**

DFC/LFC/LFM is a device designed to maintain constant the pressure inside the collectors with suction opening through INVERTER.

If the suction openings BA are opened or closed for some manufacturing process requirements you may have a pressure variation in every single suction opening which is open. In many plants, this pressure variation is dangerous for the same manufacturing process.

This inconvenient is removed by means of the suggested method composed by DFC/LFC/LFM and INVERTER.

DFC/LFC/LFM is connected to the suction collector to pick up the pneumatic signal that is converted into 4÷20mA signal. 4÷20mA signal is connected to an INVERTER that varies the speed of the fan in order to obtain the pressure maintenance inside the collector within the parameters fixed by DFC/LFC/LFM even after the opening or closure of one or more suction openings.

**TECHNICAL FEATURES**

- **Standard supply voltage:** 230 VAC / 115 VAC
- **Supply voltage on request:** 24 VAC / 24 VDC
- **Operating temperature:** -10 °C ÷ +50 °C
- **Power requirement:** < 5 VA
- **Protection degree:** IP65
- **Material:** ABS
- **dP Control:** With internal trasducer
- **Air connection P2:** 6x4 RILSAN pipe
- **Terminals:** 2,5 mm² - 250 VAC / 12 A
- **Fuse:** 250 V / 0,5 A F (5x20)

**STANDARD FEATURES**

- Pressure readout from internal transducer (max 10 kPa)
- dP zero readout regulation
- 4÷20 mA output signal for fan speed regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O
- ON/OFF depression regulation from external contact
- Multi language display

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Electronic Control System for dust collectors

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SEQUCNER FOR DEDUSTING PLANTS

DESCRIPTION

MASTER UNITS BUS SYSTEM
Master unit for BUS SYSTEM for dedusting plant cleaning cycle control with digital dP control by internal transducer.

STANDARD FEATURES

- Alarm relay contacts open
- Select Number of outputs
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Input activation from external contacts
- Differential pressure digital control
- Differential pressure readout from internal transducer (max 10 kPa)
- Additional cycles after fan stop with fan mode selection.
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- ON/OFF Cleaning cycle from external contact.
- Air connections 6x4 RILSAN pipe
- Maximum load power 25W per output
- Input voltage selection

TECHNICAL FEATURES

- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 24 VDC
- Operating temperature: -10 °C + + 50 °C
- Number of lines: 1 Max
- Power requirement: 10 VA (Stand-by)
- Protection degree: IP65
- Material: ABS
- dP Control: With internal trasducer
- Air connection P1 - P2: 6x4 RILSAN pipe
- Terminals: 2,5 mm² - 250 VAC / 12 A

OPTION ON REQUEST

- 4÷20 mA output signal of dP readout
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

ESA Electronic Engineering s.r.l.
Electronic Control System for dust collectors

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SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

MASTER UNITS BUS SYSTEM
Master unit for BUS SYSTEM for dedusting plant cleaning cycle control with digital dP control by internal transducer.

STANDARD FEATURES

- Minimum and maximum dP alarms on same relay (K2)
- Digital differential pressure control (STOP at cycle end)
- dP zero readout regulation
- dP full range 10.00 kPa = 100.0 mbar = 1012 mmH2O.
- Additional post-cleaning cycles from dP readout. Activation at STOP.
- Cleaning cycle
- Automatic operation mode
- Manual operation mode
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Interval time between ev. during post-cleaning
- Relay Voltage ON (K1)
- Consent from external compressed air pressure switch
- Manual activation of every single output from keyboard
- ON/OFF cleaning cycle from external contact
- Select Number of outputs
- Short-circuit protection of every single output
- Electric control of output activation
- Operation hours-counter
- Maximum load power 25W per output
- Multi language display

TECHNICAL FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Standard supply voltage</td>
<td>230 VAC / 115 VAC</td>
</tr>
<tr>
<td>Supply voltage on request</td>
<td>24 VAC / 24 VDC</td>
</tr>
<tr>
<td>Solenoid valves voltage</td>
<td>24 VDC</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-10 °C + +50 °C</td>
</tr>
<tr>
<td>Number of lines</td>
<td>2 Max</td>
</tr>
<tr>
<td>Power requirement</td>
<td>10 VA (Stand-by)</td>
</tr>
<tr>
<td>Protection degree</td>
<td>IP65</td>
</tr>
<tr>
<td>Material</td>
<td>ABS</td>
</tr>
<tr>
<td>dP Control</td>
<td>With internal transducer</td>
</tr>
<tr>
<td>Air connection P1 - P2</td>
<td>6x4 RILSAN pipe</td>
</tr>
<tr>
<td>Terminals</td>
<td>2.5 mm² - 250 VAC / 12 A</td>
</tr>
</tbody>
</table>

OPTION ON REQUEST

- 4÷20 mA output signal of dP readout

II 3D Ex tc IIIC IP65 T100°C

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Electronic Control System for dust collectors

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SEQUENCER FOR DEDUSTING PLANTS

MASTER UNITS BUS SYSTEM
Master unit for BUS SYSTEM for dedusting plant cleaning cycle control without dP control.

STANDARD FEATURES
- Select Number of outputs
- Activation time from 0.05 to 5.00 sec.
- Interval time from 1 to 999 sec.
- Short-circuit protection of every single output
- Manual activation of every single output from keyboard
- Input activation from external contacts
- ON/OFF cleaning cycle from external pressure switch
- Additional cycles after fan stop
- ON/OFF Cleaning cycle from external contact.
- Maximum load power 25W per output
- Input voltage selection

TECHNICAL FEATURES
- Standard supply voltage: 230 VAC / 115 VAC
- Supply voltage on request: 24 VAC / 24 VDC
- Solenoid valves voltage: 24 VDC
- Operating temperature: -10 °C + 50 °C
- Number of lines: 1 Max
- Power requirement: 10 VA (Stand-by) 30 VA Max ev. ON
- Protection degree: IP65
- Material: ABS
- Terminals: 2,5 mm² - 250 VAC / 12 A

OPTION ON REQUEST
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

Ex22PE

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SEQUENCER FOR DEDUSTING PLANTS

DESCRIPTION

MASTER UNITS BUS SYSTEM
Master unit for BUS SYSTEM for dedusting plant cleaning cycle control without dP control.

STANDARD FEATURES

✓ Relay Voltage ON (K1)
✓ Select Number of outputs
✓ Activation time from 0.05 to 5.00 sec.
✓ Interval time from 1 to 999 sec.
✓ Short-circuit protection of every single output
✓ Electric control of output activation
✓ Manual activation of every single output from keyboard
✓ Input activation from external contacts
✓ Cleaning cycle
✓ ON/OFF cleaning cycle from external pressure switch, STOP at the end of the cycle
✓ Additional cycles from voltfree contact. ALWAYS enabled.
✓ ON/OFF cleaning cycle from external contact
✓ Operation hours-counter
✓ Maximum load power 25W per output
✓ Input voltage selection

II 3D Ex tc IIIc IP65 T100°C

TECHNICAL FEATURES

Standard supply voltage: 230 VAC / 115 VAC
Supply voltage on request: 24 VAC / 24 VDC
Solenoid valves voltage: 24 VDC
Operating temperature: -10 °C + + 50 °C
Number of lines: 2 Max
Power requirement: 10 VA (Stand-by)
30 VA Max ev. ON
Protection degree: IP65
Material: ABS
Terminals: 2,5 mm² - 250 VAC / 12 A

OPTION ON REQUEST

✓ Metric Cable Glands. Type and Q.ty on request.
✓ Other Enclosures available on request.
✓ Relay K1 Cycle ON / OFF contact. Closed with active cycle
✓ Keypad lock

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Electronic Control System for dust collectors

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**Ex22RU-BA** FIRST UNIT OF THE LINE BUS

**DESCRIPTION**

First unit of the line, it can operate without external master.
Possibility to connect up to 11 RU-BB in cascade.

**STANDARD FEATURES**

- Settings 4 different activation times by dip-switch
- Settings 4 different pause times by dip-switch
- 3 post-cleaning cycles after fan stop
- Double terminal board for connection of solenoid valves

**TECHNICAL FEATURES**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard supply voltage</td>
<td>24 VDC</td>
</tr>
<tr>
<td>Supply voltage on request</td>
<td>24 VAC</td>
</tr>
<tr>
<td>Solenoid valves voltage</td>
<td>24 VDC</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-10 °C to +50 °C</td>
</tr>
<tr>
<td>Pulse Time</td>
<td>100 ms, 250 ms, 500 ms, 1 s</td>
</tr>
<tr>
<td>Interval time</td>
<td>5 s, 20 s, 60 s, 120 s</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Outputs</td>
<td>8 Solenoid valves Max</td>
</tr>
<tr>
<td>Power requirement</td>
<td>10 VA (Stand-by)</td>
</tr>
<tr>
<td></td>
<td>30 VA Max ev. ON</td>
</tr>
<tr>
<td>Protection degree</td>
<td>IP65</td>
</tr>
<tr>
<td>Material</td>
<td>ABS</td>
</tr>
<tr>
<td>Terminals</td>
<td>2,5 mm² - 250 VAC / 12 A</td>
</tr>
</tbody>
</table>

**OPTION ON REQUEST**

- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Interval time on request
- Pulse Time on request

**II 3D Ex tc IIIC IP65 T100°C**

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Phone ++39 02 972 89 899  Fax ++39 02 972 89 270
**Ex22RU-CA FIRST UNIT OF THE LINE BUS**

**DESCRIPTION**
First unit of the line, it can operate without external master. Possibility to connect up to 11 RU-CB in cascade.

**STANDARD FEATURES**
- Electropilot 24VDC ASCO NUMATICS
- Settings 4 different activation times by dip-switch
- Settings 4 different pause times by dip-switch
- 3 post-cleaning cycles after fan stop
- Double terminal board for connection of solenoid valves

**TECHNICAL FEATURES**
- Standard supply voltage: 24 VDC
- Supply voltage on request: 24 VAC
- Solenoid valves voltage: 24 VDC
- Operating temperature: -10 °C ÷ +50 °C
- Pulse Time:
  - 100 ms
  - 250 ms
  - 500 ms
  - 1 s
- Interval time:
  - 5 s
  - 20 s
  - 60 s
  - 120 s
- No. Outputs: 8 pilots Max
- Power requirement:
  - 10 VA (Stand-by)
  - 30 VA Max ev. ON
- Protection degree: IP65
- Material: ABS
- Terminals: 2,5 mm² - 250 VAC / 12 A

**OPTION ON REQUEST**
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.
- Interval time on request
- Pulse Time on request

**Certification**
II 3D Ex tc IIIIC IP65 T100°C

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**Ex22RU-BB** REMOTE UNIT BUS-SYSTEM

**DESCRIPTION**
Remote unit operating in cascade to RU-BA or Master controller.
Possibility to connect up to 11 RU-BB in cascade.

**STANDARD FEATURES**
- Selection of the Number of outputs with Dip-Switch

**TECHNICAL FEATURES**
- Standard supply voltage: 24 VDC
- Solenoid valves voltage: 24 VDC
- Operating temperature: -10 °C ÷ +50 °C
- No. Outputs: 8 Solenoid valves Max
- Power requirement: 10 VA (Stand-by)
  - 30 VA Max ev. ON
- Protection degree: IP65
- Material: ABS
- Terminals: 2.5 mm² - 250 VAC / 12 A

**OPTION ON REQUEST**
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

**II 3D Ex tc IIIC IP65 T100°C**

[Diagram with labels A, B, C]

A = Supply Voltage
B = 3 wires BUS line
C = Solenoid valves
**Ex22RU-CB** REMOTE UNIT BUS-SYSTEM

**DESCRIPTION**
Remote unit functioning in cascade to RU-CA or Master Controller. Possibility to connect up to 11 RU-CB in cascade.

**STANDARD FEATURES**
- Selection of the Number of outputs with Dip-Switch
- Electropilot 24VDC ASCO NUMATICS

**TECHNICAL FEATURES**
- Standard supply voltage: 24 VDC
- Solenoid valves voltage: 24 VDC
- Operating temperature: -10 °C + + 50 °C
- No. Outputs: 8 pilots Max
- Power requirement: 10 VA (Stand-by)
  - 30 VA Max ev. ON
- Protection degree: IP65
- Material: ABS
- Terminals: 2,5 mm² - 250 VAC / 12 A

**OPTION ON REQUEST**
- Metric Cable Glands. Type and Q.ty on request.
- Other Enclosures available on request.

A = Supply Voltage  
B = 3 wires BUS line  
C = Solenoid valves  
D = Diaphragm valve

**II 3D Ex tc IIIC IP65 T100°C**