EVI 5
Coil System
All coils feature:

- Heat resistant bobbin moulded with 30% glass filled thermoplastic polyester material
- Class H 200°C wire according to IEC 60317-13
- Built-in magnetic yoke made by low carbon iron
- Encapsulation with high quality custom designed glass filled polyamide or thermoplastic polyester
- Copper and plastic material used are UL-Listed

The use of other materials is possible upon special agreements.

Coil can be supplied and marked EAC for use in Russian Market.
More details about EAC certification can be given on customer request.

Coil can be supplied and marked CSA/UL for Electrical Insulation System (EIS) “E300N”, designated by Amisco as AMIH - UL file E343908.

The specifications and drawings contained herein are believed to be correct and are given in good faith, however no liability is accepted therefore. Manufacturer reserves the right to modify said specifications and drawings without notice for technical or commercial reasons.
COIL CODING SPECIFICATIONS

PART NUMBER: 5 X 9 9 Y K 5 5 5 4 4 *

TYPE
5E = EVI 5E
5M = EVI 5M
5P = EVI 5P
5S = EVI 5S
5F = EVI 5F

COIL BORING
13 = 13 mm
15 = 15 mm (only for EVI 5F)

ELECTRICAL CONNECTION
A = AMP Junior (only for 5P and 5S)
C = Flying leads (only for 5M, 5E and 5P)
D = DIN 43650 A
K = KOSTAL M27x1 (only for 5S)
S = AMP Superseal (only for 5S)
T = DEUTSCH DT04 (only for 5S)

SUPPLY CURRENT
A = Alternating current (A.C.)
D = Direct current (D.C.)
R = Rectified alternating current (R.A.C.)

NOMINAL VOLTAGE
Example: 012 = 12V
024 = 24V

EVI 5M/13 WINDING CODE
Nominal Voltage | Power | Winding Code
--- | --- | ---
12VDC | 10W | 02
24VDC | 10W | 02
24VAC | 13VA | 01
110VAC | 13VA | 01
230VAC | 13VA | 01

EVI 5P/13 WINDING CODE
Nominal Voltage | Power | Winding Code
--- | --- | ---
12VDC | 13W | 03
12VDC | 17W | 05
24VDC | 13W | 03
24VDC | 17W | 05
24VAC | 19VA | 04
110VAC | 19VA | 04
230VAC | 19VA | 03

EVI 5E/13 WINDING CODE
Nominal Voltage | Power | Winding Code
--- | --- | ---
12VDC | 10W | 03
24VDC | 10W | 03
24VAC | 13VA | 01
110VAC | 13VA | 01
230VAC | 13VA | 01

EVI 5F/15 WINDING CODE
Nominal Voltage | Power | Winding Code
--- | --- | ---
12VDC | 10W | 01
24VDC | 10W | 01
24VAC | 10VA | 02
110VAC | 10VA | 01
230VAC | 10VA | 01

EVI 5S/13 WINDING CODE
Nominal Voltage | Power | Winding Code
--- | --- | ---
12VDC | 20W | 01
24VDC | 20W | 01

MARKING
ZN = Standard coil (no logo)
AM = Standard coil + Amisco logo
... = Customized marking

Alternative possibilities for CUSTOMER LOGO
EVI 5M/13
DIN 43650 A (EN 175301-803 ISO 4400)
M3 Torque 0,4÷0,6Nm
FLYING LEADS
500 mm flying leads as a standard, PVC 105°C Ø2.25

EVI 5E/13
DIN 43650 A (EN 175301-803 ISO 4400)
M3 Torque 0,4÷0,6Nm
FLYING LEADS
500 mm flying leads as a standard, PVC 105°C Ø2.25
EVI 5M/13 and EVI 5E/13

Coil type EVI 5M/13 and EVI 5E/13 are suitable for pneumatics and hydraulics applications. In the first case, additional information are available in the brochure “EVI 5 S13 solenoid system”, as complete solenoid.

TECHNICAL DATA
Power: 10 Watt (standard)
Force: see the graph
Duty Cycle: 100% ED (continuous) at power and temperatures indicated
Standard Operating Voltages: 12-24 VDC 24-110-230 VAC
Other voltages on request
Operating voltage range: max: 10% over the nominal voltage min: according to the specific application
Operating temperature range: -40°C ÷ +50°C
Coil insulation: Class F

GENERAL CONSTRUCTION
According to EN 60335 and DIN VDE 0580
Materials:
Wire class H200°C
Encapsulant: glass filled Polyamide PA 6.6
Other materials on request

ELECTRICAL CONNECTIONS AND DEGREE PROTECTION
Degree of protection with connector and tube assembled with suitable seals:
DIN 43650A IP65
FLYING LEADS IP67

Force stroke curve at –10% nominal voltage and stabilized duty temperature. This graph has to be intended as an indication. In fact it can change according to the specific applications.

Above-mentioned AC consumption have to be intended only as indicative. They may change according to the tube design solutions.
EVI 5P/13
DIN 43650 A (EN 175301-803 ISO 4400)
M3 Torque 0,4÷0,6Nm

AMP JUNIOR

KOSTAL M27x1

FLYING LEADS
1000 mm flying leads as a standard, AWG 18 UL Style 3173
Coil type EVI 5P/13 is suitable for pneumatics and hydraulics applications.

**TECHNICAL DATA**

- **Power:** 13 Watt (pneumatic std) 17 Watt (hydraulic std)
- **Force:** see the graph
- **Duty Cycle:** 100% ED (continuous) at power and temperatures indicated
- **Standard operating voltages:** 12-24 VDC 24-110-230 VAC
- **Other voltages on request**
- **Operating voltage range:** max: 10% over the nominal voltage
  min: according to the specific application
- **Operating temperature range:** -40°C ÷ +50°C
- **Coil insulation:** class F

**GENERAL CONSTRUCTION**

According to EN 60335 and DIN VDE 0580

- **Materials:**
  - Wire class H200°C
  - Encapsulant: glass filled Polyamide 6.6
  - Other materials on request
- **Degree of protection:**
  - IP 54 (EN 60529)

**ELECTRICAL CONNECTIONS AND RELATED IP DEGREE**

Degree of protection with connector and tube assembled with suitable seals:

- DIN 43650A IP65
- FLYING LEADS IP65 / IP67
- KOSTAL M27x1 IP67
- AMP JUNIOR IP65

Above-mentioned AC consumption have to be intended only as indicative. They may change according to the tube design solutions.

---

**EVI 5P/13**

<table>
<thead>
<tr>
<th></th>
<th>DC</th>
<th>AC 50/60 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power DC</td>
<td>W</td>
<td>13</td>
</tr>
<tr>
<td>Inrush power AC</td>
<td>VA</td>
<td>32/27</td>
</tr>
<tr>
<td>Rated power AC</td>
<td>VA</td>
<td>19/16</td>
</tr>
<tr>
<td>Coil temperature rise @ 50°C ambient T</td>
<td>55</td>
<td>45/36</td>
</tr>
<tr>
<td>Copper temperature rise @ 50°C ambient T</td>
<td>85</td>
<td>86/72</td>
</tr>
</tbody>
</table>

Force stroke curve at –10% nominal voltage and stabilized duty temperature. This graph has to be intended as an indication. In fact it can change according to the specific applications. This graph is referred to 13W version.
EVI 5S/13

DIN 43650 A (EN 175301-803 ISO 4400)

M3 Torque 0,4÷0,6Nm

AMP JUNIOR

AMP SUPERSEAL

DEUTSCH DT-04
EVI 5S/13

Coil type EVI 5S/13 is suitable for pneumatics and hydraulics applications.

**TECHNICAL DATA**

**Power:** 20 Watt (standard)

**Force:** see the graph

**Duty cycle:** 100% ED (continuous) at power and temperatures indicated

**Standard operating voltages:** 12-24 VDC

Other voltages on request

**Operating voltage range:**
- max: 10% over the nominal voltage
- min: according to the specific application

**Operating temperature range:** -40°C ÷ +50°C

**Coil insulation:** Class F

**GENERAL CONSTRUCTION**

According to EN 60335 and DIN VDE 0580

**Materials:**
- Wire class H200°C
- Encapsulant: glass filled Polyamide PA 6.6
- Other materials on request

**Degree of protection:**
- IP 54 (EN 60529)

**ELECTRICAL CONNECTIONS AND DEGREE PROTECTION**

Degree of protection with connector and tube assembled with suitable seals:
- DIN 43650A IP65
- AMP JUNIOR integrated IP65
- DEUTSCH DT04 integrated IP69K
- AMP SUPERSEAL integrated IP69K

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**EVI 5S/13**

<table>
<thead>
<tr>
<th></th>
<th>DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power DC</td>
<td>20</td>
</tr>
</tbody>
</table>

---

0,2 0,4 0,6 0,8 1 1,2 1,4 1,6 1,8 2 2,2 2,4 2,6

0,2 0,4 0,6 0,8 1 1,2 1,4 1,6 1,8 2 2,2 2,4 2,6

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0

FORCE (N)

STROKE (mm)

Force stroke curve at -10% nominal voltage and stabilized duty temperature. This graph has to be intended as an indication. In fact it can change according to the specific applications.
EVI 5F/15

DIN 43650 A [EN 175301-803 ISO 4400]

M3 Torque 0.4÷0.6Nm

PART NUMBER 5F15D...
Coil type EVI 5F/15 is suitable for hydraulic and fluid applications, it has a 15 mm inner diameter hole.

**TECHNICAL DATA**
- **Power:** 10 Watt (standard)
- **Force:** see the graph
- **Duty cycle:** 100% ED (continuous)
  at power and temperatures indicated
- **Standard operating voltages:** 12-24 VDC
- Other voltages on request
- **Operating voltage range:**
  - max: 10% over the nominal voltage
  - min: according to the specific application
- **Operating temperature range:** -40°C ÷ +50°C
- **Coil insulation:** Class F

**GENERAL CONSTRUCTION**
- **Materials:**
  - Wire class H200°C
  - Encapsulant: glass filled Polyamide PA 6.6
  - Other materials on request
- **Degree of protection:**
  - IP 54 (EN 60529)

**ELECTRICAL CONNECTIONS AND DEGREE PROTECTION**
- Degree of protection with connector
- and tube assembled with suitable seals:
  - DIN 43650A
  - IP 65

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**EVI 5F/15**

<table>
<thead>
<tr>
<th></th>
<th>DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power DC</td>
<td>W 10</td>
</tr>
<tr>
<td>Coil temperature rise</td>
<td>76</td>
</tr>
<tr>
<td>@ 50°C ambient T</td>
<td></td>
</tr>
<tr>
<td>Copper temperature rise</td>
<td>92</td>
</tr>
<tr>
<td>@ 50°C ambient T</td>
<td></td>
</tr>
</tbody>
</table>

Force stroke curve at –10% nominal voltage and stabilized duty temperature. This graph has to be intended as an indication. In fact it can change according to the specific applications.
Certifications

EU DECLARATION OF CONFORMITY

We declare under our sole responsibility that the electric coils and pilot valves families named:

- EVI 3
- EVI 5
- EVI 7
- EVI 9
- EVI 30
- 10 mm
- 15 mm

Marked with Amisco logo and CE marking are in conformity with the following directives:

2011/65/EU (and its amendment 2015/EU/863) on the restriction of the use of certain hazardous substances in electrical and electronic equipment

2014/35/EU on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits

For the evaluation of the conformity, the following standards, or part of them, has been consulted:

- EN 60335/1: 2020 - Household and similar electrical appliances - Safety - Part 1: General requirements
- DIN VDE 0580: 2011 - Electromagnetic devices and components

April 07, 2022

Filippo Rotondo
Amisco Technical Division Director

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Via Piaggio 70, 20037, Paderno Dugnano (Italy)
Phone: +39 02 9900181
E-mail: amisco@amisco.it
Website: www.amisco.it

UKCA Declaration of Conformity

We declare under our sole responsibility that the electric coils and pilot valves families named:

- EVI 3
- EVI 5
- EVI 7
- EVI 9
- EVI 30
- 10 mm
- 15 mm

Marked with Amisco logo and UKCA marking are in conformity with the following directives:

SI 2012/3032 The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

SI 2016/1101 Electrical Equipment (Safety) Regulations 2016

For the evaluation of the conformity, the following standards, or part of them, has been consulted:

- EN 60335/1: 2020 - Household and similar electrical appliances - Safety - Part 1: General requirements
- DIN VDE 0580: 2011 - Electromagnetic devices and components

January 25, 2022

Filippo Rotondo
Amisco Technical Division Director

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E-mail: amisco@amisco.it
Website: www.amisco.it

EAC Certification

In accordance with SERCONS INTERNATIONAL Russian Certification Authority in Europe

the company: AMISCO S.p.A. Via Piaggio 70, Paderno Dugnano (MI), 20037 ITALY

fulfills the necessary requirements to be certified according to EAC regulations.

Valid until: 22.05.2023

Certification Authority: SERCONS INTERNATIONAL
Authorised Representative: SERCONS GROUP

SERCONS INTERNATIONAL — Certification Authority
Piazza della Repubblica, 32, 20124 MILAN | +39 02 8001 2140 | www.SERCONS.ch/it

Certificate of Compliance

Issued to: AMISCO SPA
VIA PIAGGIO 70
20037 PADERNO DUGNANO-MI ITALY

This is to certify that the representative sample of SYSTEMS, ELECTRICAL INSULATION

Class 110 (0.6 kV) transformer, mains, or coil insulation system designated AMEL

have been investigated by Underwriters Laboratories Inc. (UL) in accordance with the standards indicated on this Certificate.

Additional information:
See UL Online Certification Directory at www.UL.com for additional information.

Only those products bearing the UL Recognized Component Mark for the U.S. and Canada should be considered as being covered by UL’s Recognized Component Mark Certification Program. The U.S. Recognized Component Mark for the U.S. generally protects the manufacturer’s obligation to the ultimate end user. UL’s Recognized Component Mark for the U.S. is not intended to be a guarantee of specific product safety. The UL Recognized Component Mark for the U.S. is not intended to be used in connection with equipment or systems other than the equipment or systems for which the Mark is intended to be used.

Look for the UL Recognized Component Mark on the product.

William B. Careys
Director, North American Certification Programs
Underwriters Laboratories Inc.