



Danfoss 042R0151 Solenoid Coil For Control In Potentially Explosive Areas Installation Guide

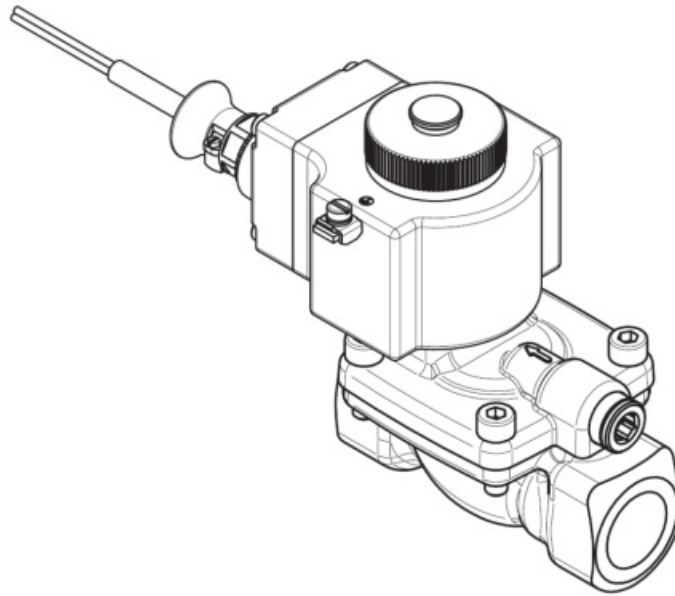
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Danfoss 042R0151 Solenoid Coil For Control In Potentially Explosive Areas

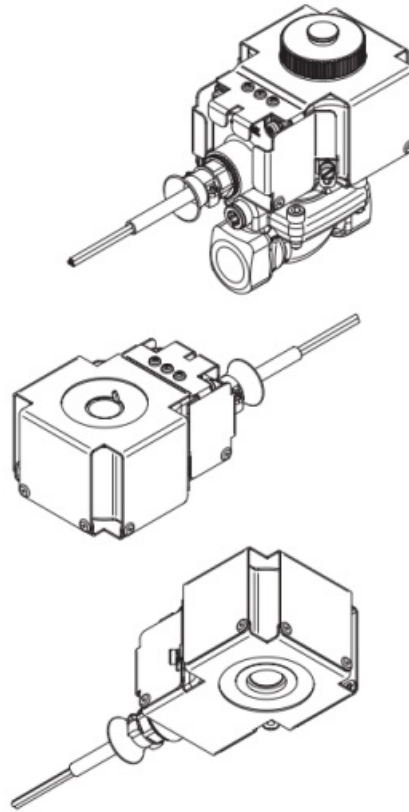


Specifications

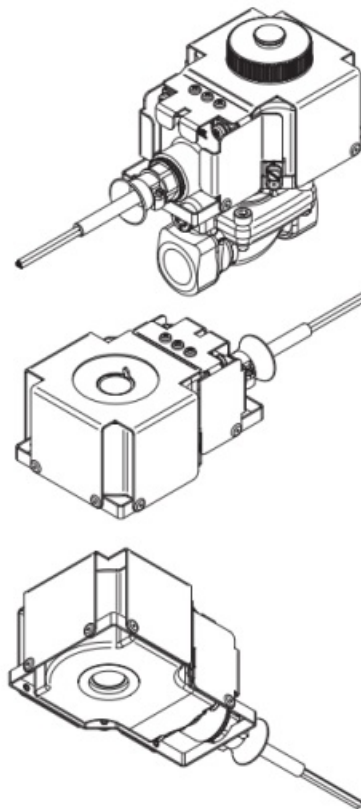
- **Nominal voltage:** 24V DC, 110V, 230V, 240V
- **Frequency:** 50/60 Hz
- **Nominal current:** 0.46A – 0.053A
- **Weight:** 1.0 kg
- **Protection degree:** IP67 (Evaluated by Danfoss)
- **Pollution degree:** 3 (EN60730-1)
- **Overvoltage category:** II (2.5 kV)
- **Mode of operation:** Type 1 action (EN60730-1)

Installation

A



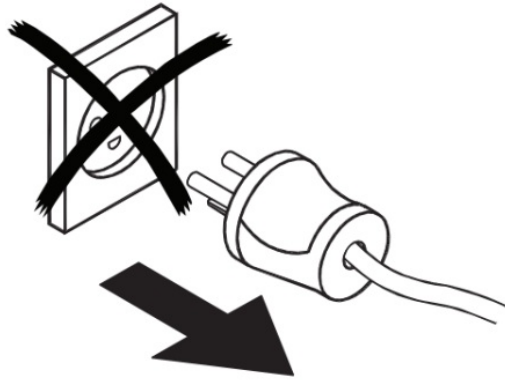
B



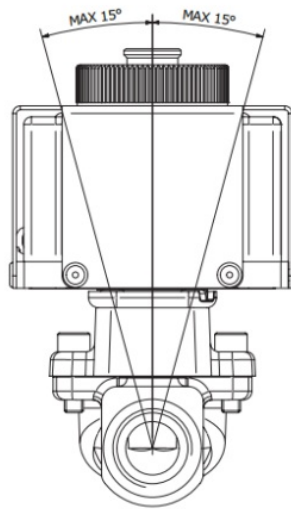
Connection

Connect the solenoid coil according to the provided wiring diagram.

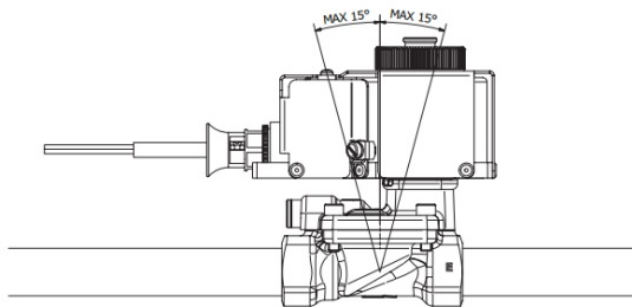
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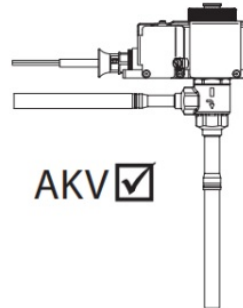
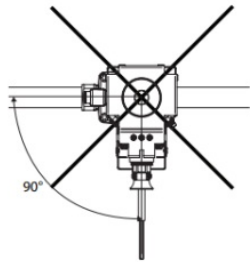
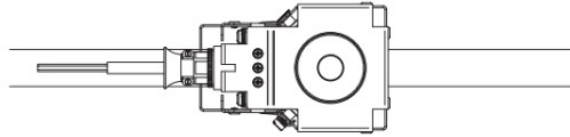


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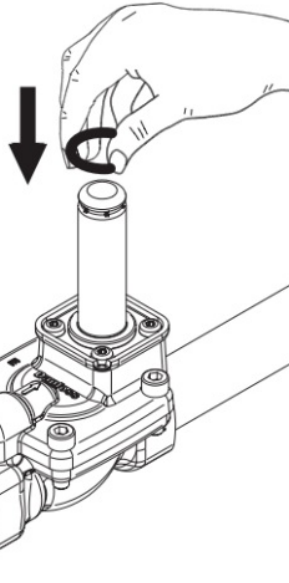
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✓ EV

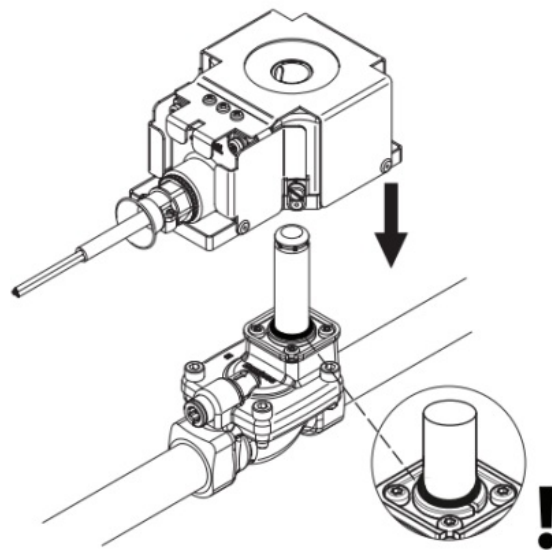


AKV ✓

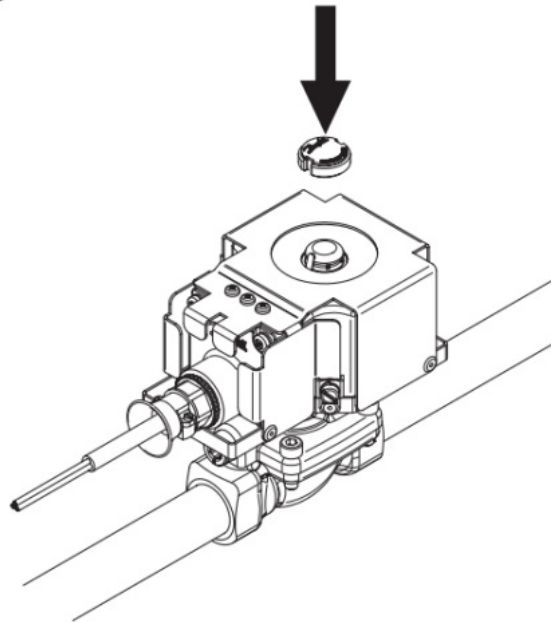
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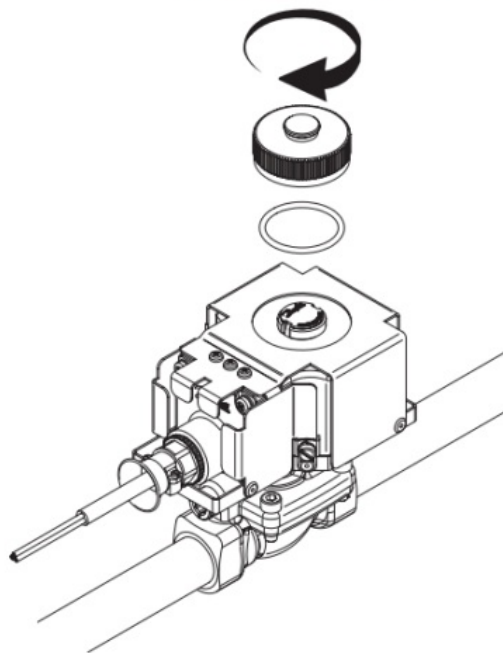


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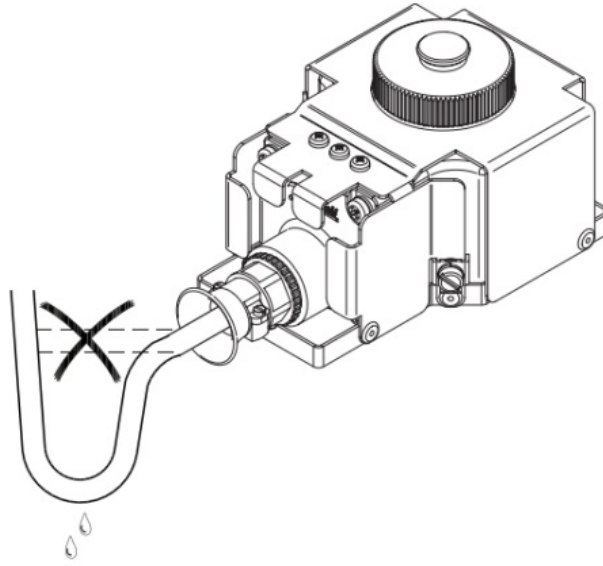


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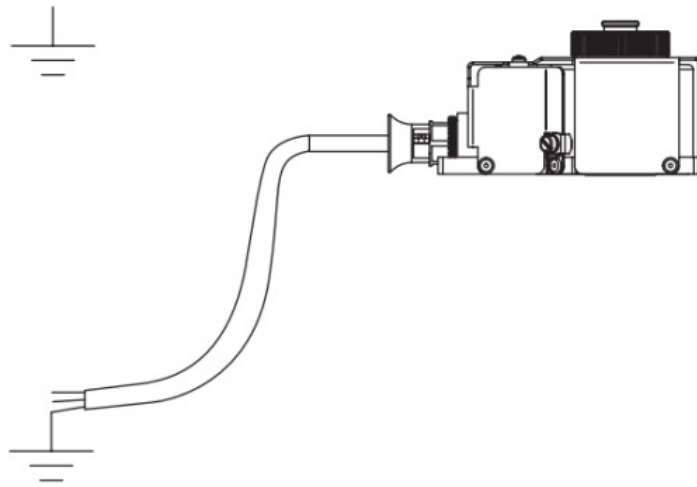
1.5 Nm \pm 0.15 Nm



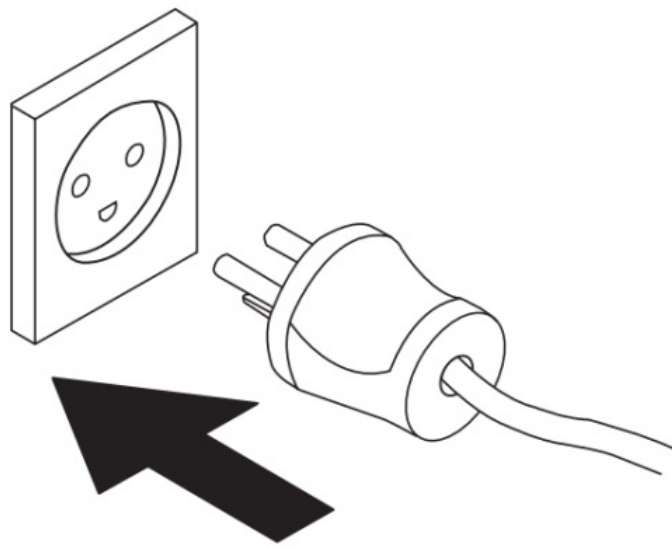
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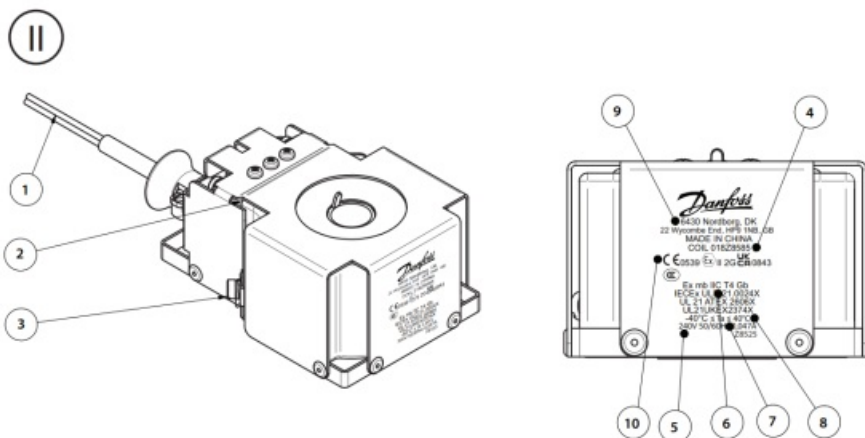


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Identification

1. Green/Yellow cord for earthing
2. Week and date of manufacturing
3. External earth terminal
4. Code number
5. Voltage
6. Approval/Certificate number
7. Frequency
8. Ambient temperature range
9. Country of manufacturing
10. Approval logos



EX Certifications

- Ex mb IIC T4 Gb

- IECEX ULD 21.0024X
- UL 21 ATEX 2606X
- UL21UKEX2374X

The coil may only be installed with the following valve combinations

Valves work with A

- EVM-EVRF-EVRP-EVRB
- AKV, AKVA
- EVR 2, 3, 6
- EVRS(T) 3
- EV210BW, EV210B
- ICLX
- VDH, VDHT EAM, VDHT
- VPH
- EVRA 3, EVRA(T) 3

Valves work with B

- EV220B 6, 10, 12, 14, 18, 22
- EV221BW
- EV251B
- EVRS(T) 10-20
- ICF
- EV227B
- EVRA 10, 15, 20 (Before 1996)
- EVRA(T) 10, 15, 20 (Before 1996)

Valves work with both

- EVR 10, 15, 20, 22, 25, 32, 40
- EV220B 15, 20, 25, 32, 40, 50
- EV220BW
- EV220B 65, 80, 100
- EV250BW, EV250B
- VDH 30 EC
- EV222B
- EV224B
- EVRA 10, 15, 20, 25, 32, 40 (After 1996)
- EVRA(T) 10, 15, 20 (After 1996)

Application and specification

Nominal voltage	Frequency	Nominal current	Code no with cover and bottom		Code no with cover and frame	
[V]	[Hz]	[A]	5m cable	10m cable	5m cable	10m cable
24	DC	0.46	018Z8589	018Z8569	018Z8596	018Z8575
24	50/60	0.48	018Z8588	018Z8568	018Z8595	018Z8574
110	50/60	0.102	018Z8587	018Z8567	018Z8593	018Z8573
230	50/60	0.053	018Z8586	018Z8566	018Z8592	018Z8572
240	50/60	0.047	018Z8585	018Z8565	018Z8591	018Z8571

Ambient temp. ss)	$-40\text{ }^{\circ}\text{C} \leq T_{\text{ambient}} \leq +40\text{ }^{\circ}\text{C}$	Protection degree	IP67(Evaluated by Danfo
Media	$-40\text{ }^{\circ}\text{C} < T_{\text{media}} < +90\text{ }^{\circ}\text{C}$	Polution degree	3 (EN60730-1)
Humidity	0 – 97 %	Over voltage category	II (2.5 kV)
Voltage)	+6 / -10 %	Mode of operation	Type 1 action (EN60730-1)
Connection	3-Wire cable 3 x 0.75mm ²	External earth wire	Minimum wire gauge
> 4mm ²			

Safety instruction

All national safety regulations must be complied with in connection with the installation, start-up, and operation of the Danfoss solenoid valve. Furthermore, the requirements of the declaration of conformity and national regulations for installation in an explosion area. Disregarding such regulations involves a risk of serious personal injury or extensive material damage. Work in connection with the solenoid valve mentioned must be performed only by suitable, qualified persons. Safety requirements for use in explosive atmospheres are fulfilled through compliance certificates

- Ex mb IIC T4 Gb
- IECEX ULD 21.0024X
- UL 21 ATEX 2606X
- UL21UKEX2374X

Specific Condition of Safe Use

- The solenoid coil shall be protected against impact during use
- Protect the coil against direct sunlight and other ultraviolet sources
- Disconnect the power before dismounting the coil
- Install the coil and cable according to IEC/EN/ EN BS 60079-14
- The cable supplied with the solenoids must not be handled or flexed, and shall be protected against impact if the ambient temperature is below 0 °C

- The coils must be installed in the orientation shown on page 1
- The permitted process medium temperature range is -40 °C to +90 °C
- The capacitance of exposed, isolated, metallic parts is 7pF
- The cable is only for fixed installation, and the minimum bending diameter for fixed installation: $r \geq 35 \text{ mm}$ (2)
- The cable jacket material is PVC
- The cable operating temperature range is -40 – 90 °C
- The product is provided with a yellow/green PE Conductor as well as an external earth terminal. These shall not be used simultaneously.

If the external earth connection is connected to earth or bonding system, the PE Conductor must be cut off, isolated, and not connected. If the PE Conductor is connected to earth, the external earth terminal must be left without any connection. For the external earth terminal, the size of the earth core shall be a minimum of 4 mm², and the installer shall use a suitable method, e.g., crimp terminal, to ensure the security of the external earth connection. The screw for external PE shall be mounted with 1.2 Nm \pm 0.2. The external earth conductors shall be physically secured close to the coil connection to ensure that the conductors cannot be readily loosened or twisted

- The end user must ensure the earthing of the coil is maintained
- The non-detachable cords method of Z repairing is not allowed. If the coil failed, it must be replaced with a new coil

UK-CA contact address

Danfoss Ltd. 22 Wycombe End, HP9 1NB, GB

CE contact address

Danfoss A/S DK-6430 Nordborg Denmark

FAQs

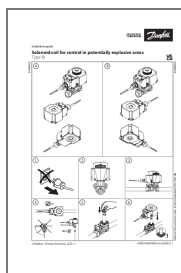
Q: What should I do if the solenoid coil is not functioning properly?

A: Check the wiring connections, ensure the voltage input matches the specifications, and consult a qualified technician.

Q: Can the solenoid coil be used in explosive atmospheres?

A: Y-compliance certificates fulfill the safety requirements for use in explosive atmospheres. Ensure that you follow all safety instructions.

Documents / Resources



[Danfoss 042R0151 Solenoid Coil For Control In Potentially Explosive Areas](#) [pdf] Installation Guide

018Z8589, 018Z8569, 018Z8588, 018Z8568, 018Z8587, 018Z8567, 018Z8586, 018Z8566, 018Z8585, 018Z8565, 042R0151 Solenoid Coil For Control In Potentially Explosive Areas, 042R0151, Solenoid Coil For Control In Potentially Explosive Areas, Control In Potentially Explosive Areas, Potentially Explosive Areas, Explosive Areas

References

- [User Manual](#)

Manuals+, Privacy Policy

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