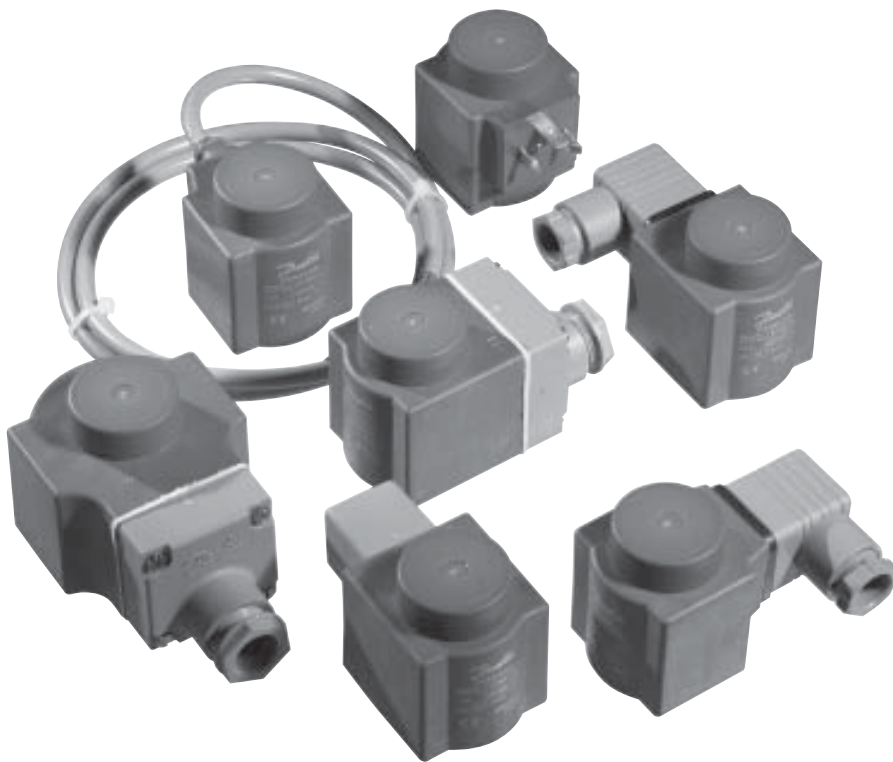


Technical leaflet

## Coils for solenoid valves



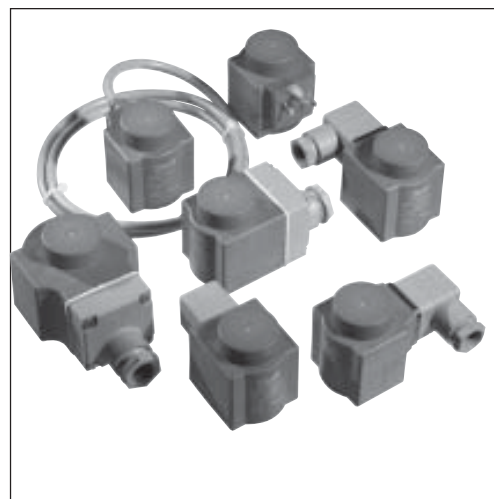


**Introduction**

The coils are specially designed to operate in the aggressive environment of high humidity and temperature fluctuations that you find in most refrigeration systems.

The new Clip-on fastening system ensures a faultless installation and makes the coils easy to mount and dismount. A Danfoss Clip-on coil can be mounted without any tools at all, and it is simple to dismount the coil by means of a screwdriver.

The Clip-on coils are available for the entire range of Danfoss solenoid valves for refrigeration, freezing and air conditioning purposes.


**Features**

- Encapsulated coils with long operating life, even under extreme conditions
- Standard coils for a.c. or d.c.
- Standard coils available with 3-core cable, terminal box or DIN plugs
- Standard coils from 12 V to 420 V, 50, 60 or 50/60 Hz
- Standard coils dimensioned for max. opening differential pressure (MOPD) of up to 21 bar
- Coils can be fitted without the use of tools

**Technical data**
*Ambient temperature*

10 or 12 W a.c. coil  
for NC (normally closed) valve:  
-40 → +80°C

10 W a.c. coil  
for NO (normally open) valve:  
-40 → +55°C

20 W d.c. coil  
for NC and NO valve:  
-40 → +50°C

*Permissible voltage variation*

10 and 12 W a.c. coils: +10 → -15% and as double frequency coils: ±10%  
a.c. coils for 220-230 / 380-400 V: +6 → -15%  
and as double frequency coils: +6 → -10%  
20 W d.c. coils: ±10%.

*Enclosure*

IP 67 with cable or terminal box  
IP 20 with DIN plugs and protective cap  
IP 65 with DIN socket  
IP 00 with DIN plugs.

*Approvals*

See under the required solenoid valve.

**Connection**
*3-core cable*

The external thread in the screwed cable entry suits flexible steel hose or corresponding cable protection.

*Terminal box*

Leads are connected to terminal screws in the terminal box. The box is fitted with a Pg 13.5 screwed entry for 6 → 14 mm cable.  
Max. lead cross section: 2.5 mm<sup>2</sup>.

*DIN plugs*

The three pins on the coil can be fitted with spade tabs, 6.3 mm wide (to DIN 46247). The two current carrying pins can also be fitted with spade tabs, 4.8 mm wide.  
Max. lead cross section: 1.5 mm<sup>2</sup>.  
Use of the protective cap supplied will prevent inadvertent contact with live parts.

*DIN socket*

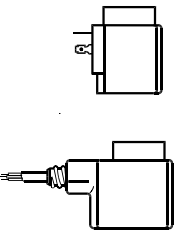
(to DIN 43650)  
Leads are connected in the socket. The socket is fitted with a Pg 11 screwed entry for 6 → 12 mm.

Ordering

Clip-on coils

Valve type	Voltage V	Frequency Hz	Code no.				Appendix no. *)	Power consumption
			With 1 m 3-core cable IP 67	With terminal box IP 67	With DIN plugs and protective cap IP 20	With DIN plugs**)		

Alternating current a.c.

 EVR 2 → 40 (NC) EVR 6 → 22 (NO) EVRC EVRA EVRAT EVRS / EVRST PKVD EVM (NC)	12	50	018F6256	018F6706	018F6181		15	Holding: 10 W 21 VA  Inrush: 44 VA
	24	50	018F6257	018F6707	018F6182	018F7358	16	
	42	50	018F6258	018F6708	018F6183		17	
	48	50	018F6259	018F6709	018F6184		18	
	115	50	018F6261	018F6711	018F6186	018F7361	22	
	220-230	50	018F6251	018F6701	018F6176	018F7351	31	
	240	50	018F6252	018F6702	018F6177	018F7352	33	
	380-400	50	018F6253	018F6703	018F6178		37	
	420	50	018F6254	018F6704	018F6179		38	
	24	60	018F6265	018F6715	018F6190		14	
	115	60	018F6260	018F6710	018F6185		20	
	220	60	018F6264	018F6714	018F6189		29	
	240	60	018F6263	018F6713	018F6188		30	
	110	50/60	018F6280	018F6730	018F6192	018F7360	21	
	220-230	50/60	018F6282	018F6732	018F6193	018F7363	32	

Direct current d.c.

Coil type I

 EVR 2 → 15 (NC) EVR 25 → 40 (NC/NO) EVR 6 → 15 (NO) EVRC 10 → 15 EVRA 3 → 15 (NC) EVRA 25 → 40 (NC) EVRAT 10 → 15 (NC) EVRS / EVRST 3 → 15 PKVD EVM (NC/NO)	12			018F6856			01	20 W
	24			018F6857			02	
	48			018F6859			04	
	110			018F6860			06	
	115			018F6861			07	
	220			018F6851			09	

Direct current d.c.

Coil type II

 EVR 20 → 22 (NC/NO) EVRC 20 EVRA 20 EVRAT 20 EVRST 20	12			018F6886			01	20 W
	24			018F6887			02	
	48			018F6889			04	
	110			018F6890			06	
	115			018F6891			07	
	220			018F6881			09	

See "Opening differential pressure" under "Technical data" for the valve concerned.

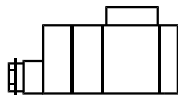
\*) Indicates voltage and frequency

\*\*) Can only be used with DIN socket

\*\*\*) When replacing a coil with terminal box, it is sufficient to change the coil unit itself. Therefore, order coil with DIN plugs and protective cap.

Ordering (continued)

Special coils



Valve type	Voltage V	Frequency Hz	Code no.	Appendix no. Indicates voltage and frequency	Power consumption
			With terminal box IP 67		

Alternating current a.c.

EVR 3 → 40	24	50	<b>018F6807</b>	16	Holding: 12 W 26 VA  Inrush: 55 VA
EVRC	42	50	<b>018F6808</b>	17	
EVRA	48	50	<b>018F6809</b>	18	
EVRAT	110	50	<b>018F6811</b>	22	
EVRS / EVRST	220-230	50	<b>018F6801</b>	31	
PKVD	240	50	<b>018F6802</b>	33	
EVM (NC / NO)	380-400	50	<b>018F6803</b>	37	
	24	60	<b>018F6815</b>	14	
	110	60	<b>018F6813</b>	20	
	220	60	<b>018F6814</b>	29	

See "Opening differential pressure" under "Technical data" for the valve concerned.

When replacing a coil with terminal box, it is sufficient to change the coil unit itself. Therefore, order coil with DIN plugs and protective cap.



Accessories

Description	Code no.
DIN socket	<b>042N0156</b>
Terminal box with build-in light emitting indicator diode for solenoid valves	<b>018Z0089</b>

Dimensions and weights

See under the required solenoid valve.

**Introduction**

Danfoss has developed a series of ATEX approved coils for use in EX zone 2. The coils are equipped with clip-on fastening system for easy and faultless installation. Thus the coil can be installed without use of tools and easily dismantled by means of a screwdriver.


**Features**

- ATEX approved for use in EX zone 2
- Embedded coils with long lifetime - even under extreme conditions
- Available with 1 m 3-core cable or terminal
- Quick and safe mounting with "clip-on" coil
- Mounting on valve without use of tools
- Standard coils for a.c. and d.c.
- Standard coils from 24 to 240 V
- Standard coils dimensioned to max. opening differential pressure (MOPD) up to 21 bar

**Approval**

EExnAII T3 DEMKO 01 ATEX 130591X

**Technical data**
*Ambient temperature*

- 11 or 14 W, 50 Hz a.c. coil -40 → +50°C
- 13 W, 50/60 Hz a.c. coil -25 → +50°C
- 20 W d.c. coil -25 → +50°C

*Temperature of medium*  
max. 105°C

*Enclosure for coil*

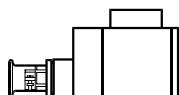
- IP 67
- Permissible voltage variation*
- 11 and 14 W a.c. coils: +10 → -15% and as double frequency coils: ±10%
  - 20 W d.c. coils: ±10%

**Connections**
*3-core cable*

The external thread of the cable entry is suitable for flexible steel hose or similar cable protection

*Terminal box*

The cables are connected with the terminal screws in the terminal box which is equipped with a Pg 13.5 cable gland for 6 → 14 mm cable.  
Max. cable diam.: 2.5 mm<sup>2</sup>

**Ordering**  
 Coils


Type	Voltage V	Frequency Hz	Code no.		Power consumption
			With 1 m 3-core cable IP 67	With terminal box IP 67	

*Alternating current a.c.*

EVR 2 → 40 (NC)	24	50	018F5257	<b>018F5707</b>	Holding: 11 W 21 VA
EVR 6 → 22 (NO)	48	50	018F5259	<b>018F5709</b>	
EVRC	115	50	018F5261	<b>018F5711</b>	
EVRA/EVRAT	230	50	018F5251	<b>018F5701</b>	
EVRS/EVRST	240	50	018F5252	<b>018F5702</b>	
PKVD					Inrush: 44 VA
EVM(NC)	230	50/60	018F5282	<b>018F5732</b>	Holding: 13 W  25 VA Inrush: 48 VA
	24	50/60	018F5277	<b>018F5727</b>	

*Alternating current a.c.*

EVR 2 → 40 (NC)	24	50		<b>018F5807</b>	Holding: 14 W 26 VA Inrush 55 VA
EVR 6 → 22 (NO)	48	50		<b>018F5809</b>	
EVRC	110	50		<b>018F5811</b>	
EVRA/EVRAT	230	50		<b>018F5801</b>	
EVRS/EVRST	240	50		<b>018F5802</b>	
PKVD					
EVM(NC)					

*Direct current d.c.*

EVR 2 → 15 (NC)	24			<b>018F5857</b>	20 W
EVR 25 → 40 (NC/NO)					
EVR 6 → 15 (NO)					
EVRC 10 → 15					
EVRA 3 → 15 (NC)					
EVRA 25 → 40 (NC)					
EVRAT 10 → 15 (NC)					
EVRS/EVRST 3 → 15					
PKVD					
EVR (NC/NO)					

Must always be installed with fuse ahead of coil

**Introduction**

With the Danfoss general purpose coils, type GP, for solenoid valves the mounting with a "click-on". Danlok™ makes mounting faster and easier and keeps the coil safely in place.



**Features**

- Easy mounting and dismounting
- No loose parts during operation
- Suitable to all standard solenoid valves
- Available with junction box or conduit boss

**Approvals**

- UL listed with EVR, MH 7648
- CSA certified, SA 52727

**Technical data**

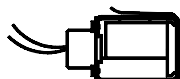
*Enclosure*  
 junction box: NEMA 2 ~ IP 12 - 32  
 Conduit boss: NEMA 4 ~ IP 54

**Ordering**

Connection	Cable length in.	Voltage V	Frequency Hz	Code.no	Power consumption
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Junction box



Conduit coil

*Vekselstrøm a.c.*

Junction box		120/208-240	50/60	<b>018Z7600</b>	Indkoblet 17.5 W 40 VA
Junction box		24	50/60	<b>018Z7613</b>	
Junction box		110/120	50/60	<b>018Z7612</b>	
Junction box		208/240	50/60	<b>018Z7611</b>	
Conduit boss	18	24	50/60	<b>018Z7623</b>	under indkobling 76VA
Conduit boss	18	110/120	50/60	<b>018Z7622</b>	
Conduit boss	18	208/240	50/60	<b>018Z7621</b>	

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