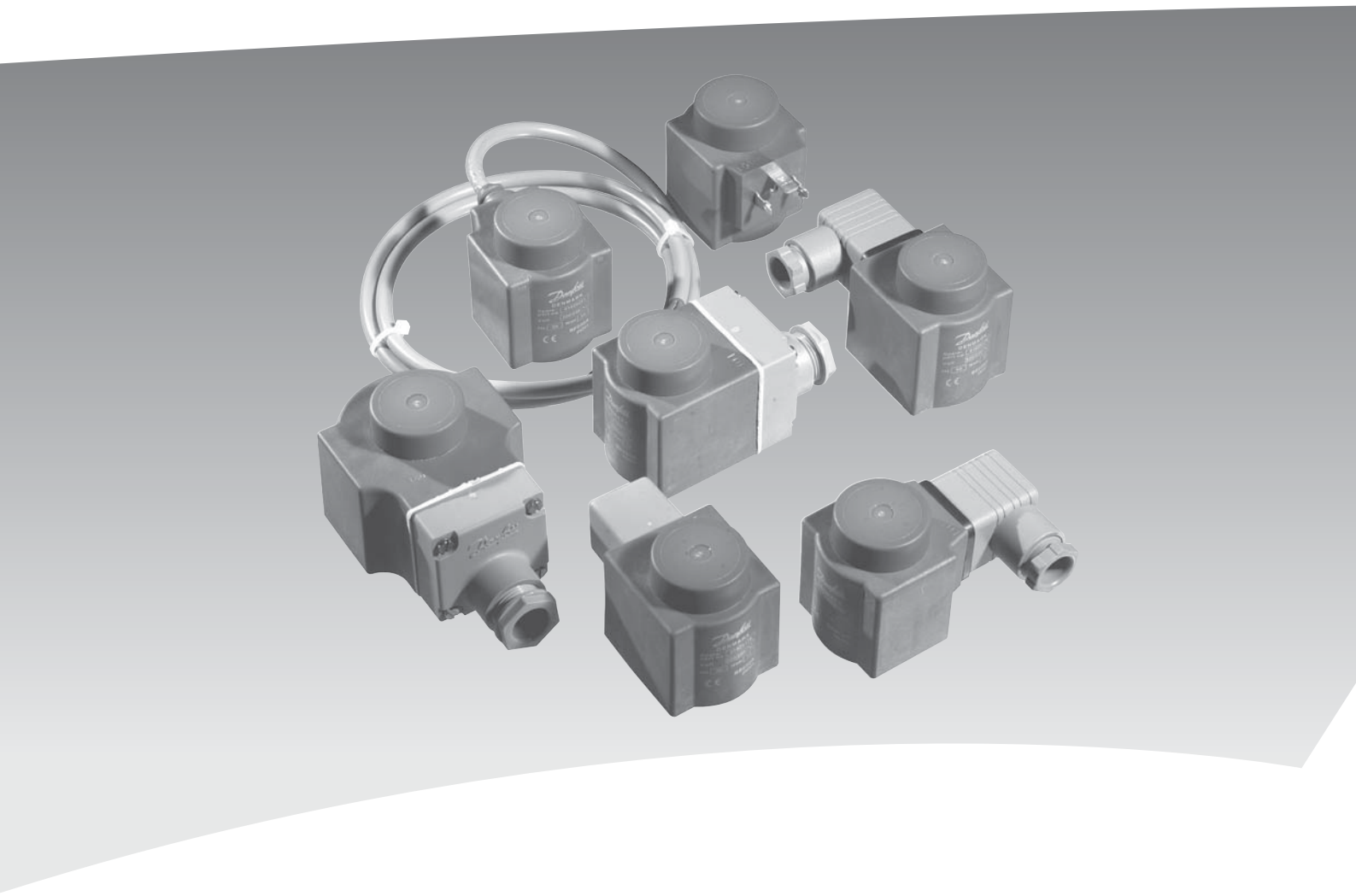


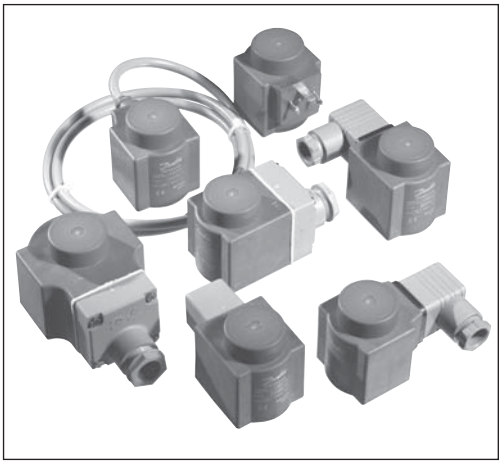
Coils for solenoid valves

REFRIGERATION AND
AIR CONDITIONING

Technical leaflet

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

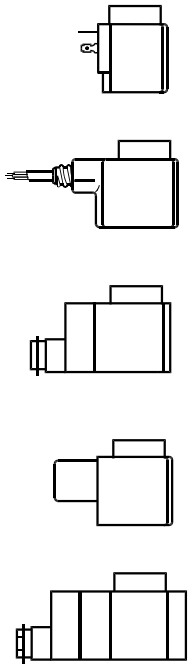
3-core cable
The external thread in the screwed cable entry suits flexible steel hose or corresponding cable protection.

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^2.

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^2.
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



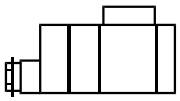
Valve type	Voltage V	Frequency Hz	Code no. With 1 m 3-core cable IP 67	Code no. With terminal box IP 67	Code no. With DIN plugs and protective cap IP 20	Code no. With DIN plugs**)	Appen-dix no.*)	Power con-sumption
Alternating current a.c.								
EVR 2 → 40 (NC) EVR 6 → 22 (NO) EVRC EVRA EVRAT EVRS / 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	
	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. With terminal box IP 67	Appendix no. Indicates voltage and frequency	Power consumption
Alternating current a.c.					
EVR 3 → 40 EVRC EVRA EVRAT EVRS / EVRST PKVD EVM (NC / NO)	24	50	**018F6807**	16	Holding: 12 W 26 VA Inrush: 55 VA
	42	50	**018F6808**	17	
	48	50	**018F6809**	18	
	110	50	**018F6811**	22	
	220-230	50	**018F6801**	31	
	240	50	**018F6802**	33	
	380-400	50	**018F6803**	37	
	24	60	**018F6815**	14	
	110	60	**018F6813**	20	
	220	60	**018F6814**	29	

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

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

Accessories

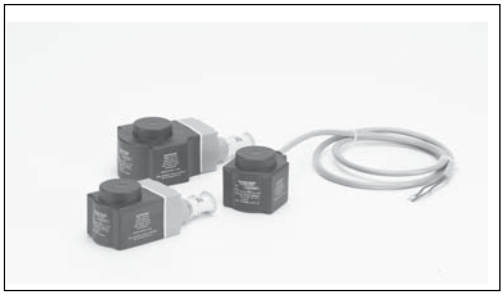
Description	Code no.
DIN socket	**042N0156**
Terminal box with build-in light emmiting indicator diode for solenoid valves	**018Z0089**

Dimensions and weights
See under the required solenoid valve.

Technical leaflet **Coils for solenoid valves**

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 dismounted by means of a screwdriver.



Features

- ATEX approved for use in EX zone 2
- Embedded coils with long lifetime - even under extreme conditons
- 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

EExnAIIT3 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

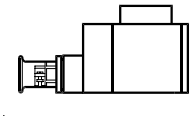
- 11 and 14 W a.c. coils: +10 → –15% and as double frequency coils: ±10%
- 20 W d.c. coils: ±10%

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^2

Ordering
Coils



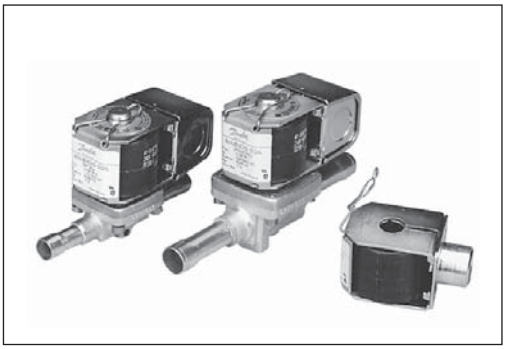
Type	Voltage V	Frequency Hz	Code no. With 1 m 3-core cable IP 67	Code no. With terminal box IP 67	Power consumption
Alternating current a.c.					
EVR 2 → 40 (NC) EVR 6 → 22 (NO) EVRC EVRA/ EVRAT EVRS / EVRST PKVD EVM (NC / NO)	24	50		**018F5707**	Holding: 11 W 21 VA Inrush: 44 VA
	230	50		**018F5701**	
	240	50		**018F5702**	
	230	50/60		**018F5732**	Holding: 13 W 25 VA Inrush: 48 VA
	224	50/60		**018F5727**	
Alternating current a.c.					
EVR 2 → 40 (NC) EVR 6 → 22 (NO) EVRC EVRA/ EVRAT EVRS / EVRST PKVD EVM (NC)	24	50		**018F5807**	Holding: 14 W 26 VA Inrush: 55 VA
	110	50		**018F5811**	
	230	50		**018F5801**	
Direct current d.c.					
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 EVR (NC/NO)	24			**018F5857**	20 W

Must always be installed with fuse ahead of coil

Technical leaflet **UL - approved coil, type GP**

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

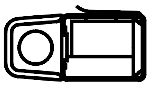
Approvals

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

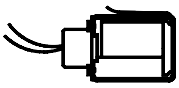
Technical data

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

Ordering



Junction box



Conduit coil

Connection	Cable length in.	Voltage V	Frequency Hz	**Code.no**	Power consumption
Alternating current a.c.					
Junction box		120/208-240	50/60	**018z7600**	Holding: 17.5 W 40 VA Inrush: 76 VA
Junction box		24	50/60	**018z7613**	
Junction box		110/120	50/60	**018z7612**	
Junction box		208/240	50/60	**018z7611**	
Conduit boss	18	24	50/60	**018z7623**	
Conduit boss	18	110/120	50/60	**018z7622**	
Conduit boss	18	208/240	50/60	**018z7621**	