

**Data sheet** 

# **Solenoid coils**



Danfoss solenoid valves and coils are usually ordered separately to allow maximum flexibility, enabling you to select a valve and coil combination to best suit your needs.

The Danfoss coil program consists of both the easy-to-handle Clip-On system and traditional coils with threaded fastener.

Danfoss offer a wide range of application specific coils for e.g. steam or hazardous areas. The coils are available with approvals such as EN60730-1, EEx/ATEX and UL.

#### **Features**

- Encapsulated coils with long operating life, even under extreme conditions
- Standard coils for AC or DC
- Standard coils from 12 V to 400 V, 50, 60 or 50/60 Hz
- Coils can be fitted without use of tools
- Coils can only be removed with use of tools
- Standard coils available with:
  - Cable plugs
  - Industrial plugs
  - Terminal box
  - 3 core cable
  - Junction box
  - Conduit hub



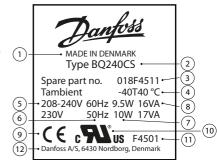
#### **Coil identification**

Technical data is printed directly on the coil:

- 1 Country of origin
- 2 Coil type
- 3 Spare part no. (code no.)
- 4 Ambient temperature

 $(-40T40 \, ^{\circ}\text{C} = \text{Ambient temperature range: } -40 \, ^{\circ}\text{C} \text{ to } 40 \, ^{\circ}\text{C})$ 

- 5 Supply voltage [V]
- 6 Frequency [Hz]
  7 Power consumption [W]
- 8 Power consumption [VA]
  9 CE marking
- 10 UL recognized coil
- Raw coil number (F4501=Raw coil number 018F4501)
- Point of contact





#### **BA, High performance coils**



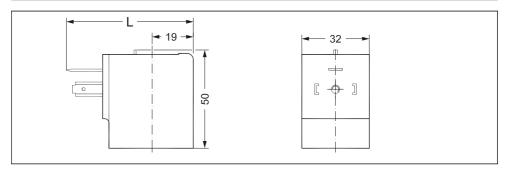
- Cable plug enclosure:
  - IP00 version with DIN 43650 A spade connectors
  - IP20 version with protective cap
  - IP65 version with cable plug
- Nut and snap fastener included
- In accordance with:
  - RoHS Directive 2011/65/EU
  - Low Voltage Directive 2014/35/EU
  - EN60730-1
  - EN60730-2-8

		Supply			Power cor	sumption	
Туре	Tambient [°C]	voltage [V]	Voltage variation	Frequency [Hz]	[W]	[VA]	Code no.
BA024A	-40T40	24	-15%, +10%	50	8.5	17	042N7508
BA048A	-40T40	48	-15%, +10%	50	9.5	18	042N7510
BA115A	-40T40	115	-15%, +10%	50	9.0	18	042N7512
BA230A	-40T40	220 – 230	-15%, +6%	50	12	22	042N7501
BA240A	-40T40	240	-15%, +10%	50	10	20	042N7502
BA400A	-40T40	380 – 400	-15%, +6%	50	12	22	042N7504
BA024B	-40T40	24	-15%, +10%	60	9.5	19	042N7520
BA115B	-40T40	115	-15%, +10%	60	12	23	042N7522
BA220B	-40T40	220	-15%, +10%	60	11	21	042N7523
BA012D	-40T40	12	±10%	DC	14	-	042N7550
BA024D	-40T40	24	±10%	DC	14	-	042N7551

#### **Technical data**

Design	In accordance with VDE 0580
Insulation of coil windings	Class H according to IEC 85
Connection	Spade connector in accordance with DIN 43650 form A
Enclosure, IEC 529	IP00 with spade connector, IP20 with protective cap, IP65 with cable plug
Duty rating	Continuous
Plug type	Cable plug (042N0156)

Туре	L without cable plug [mm]	L with protective cap [mm]	L with cable plug [mm]	Weight [kg]
BA	54	71	79	0.16





#### **BD, High performance coils**



- Cable plug enclosure:
  - IP00 version with DIN 43650 A spade connectors
  - IP20 version with protective cap
  - IP65 version with cable plug
- Nut and snap fastener included
- In accordance with:
  - RoHS Directive 2011/65/EU
  - Low Voltage Directive 2014/35/EU
  - EN60730-1
  - EN60730-2-8

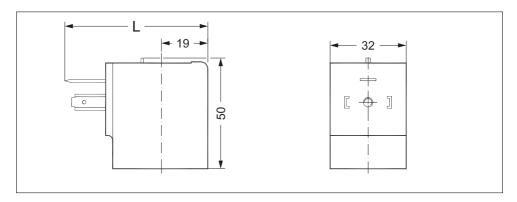
		Supply			Power cor	sumption	
Туре	Tambient [°C]	voltage [V]	Voltage variation	Frequency [Hz]	[W]	[VA]	Code no.
BD024A	-40T40	24	-15%, +10%	50	15	29	042N7597
BD230A	-40T40	230	-10%, +6%	50	14	28	042N7591

#### **Technical data**

Design	In accordance with VDE 0580
Insulation of coil windings	Class H according to IEC 85
Connection	Spade connector in accordance with DIN 43650 form A
Enclosure, IEC 529	IP00 with spade connector, IP20 with protective cap, IP65 with cable plug
Duty rating	Continuous
Plug type	Cable plug (042N0156)

#### **Dimensions and weight**

Туре	L without cable plug [mm]	L with protective cap [mm]	L with cable plug [mm]	Weight [kg]
BD	54	71	79	0.16





#### **BB, High performance coils**



- Enclosure:
  - IP00 version with DIN 43650 A spade connectors
  - IP20 version with protective cap
  - IP65 version with mounted cable plug
- In accordance with:
  - RoHS Directive 2011/65/EU
  - Low Voltage Directive 2014/35/EU
  - EN60730-1
  - EN60730-2-8

		Supply			Power con	sumption	
Туре	Tambient [°C]	voltage [V]	Voltage variation	Frequency [Hz]	[W]	[VA]	Code no.
BB024AS	-40T80	24	-15%, +10%	50	11	19	018F7358
BB115AS	-40T80	115	-15%, +10%	50	11	19	018F7361
BB230AS	-40T80	220 - 230	-15%, +10%	50	11	19	018F7351
BB240AS	-40T80	240	-15%, +10%	50	11	19	018F7352
DD 440.CC	40750	380 - 400	-15%, +10%	50	14	24	01057353
BB440CS	-40T50	440	-15%, +10%	60	15	24	018F7353
BB024BS	-40T80	24	-15%, +10%	60	14	23	018F7365
DD110CC	40750	110	±10%	50	15	28	01057360
BB110CS	-40T50	110	±10%	60	13	22	018F7360
DD220CC	40750	220 - 230	±10%	50	16	31	04057363
BB230CS	-40T50	220 - 230	±10%	60	13	24	018F7363
BB012DS	-40T50	12	±10%	DC	14	_	018F7396

#### **Technical data**

BB024DS

-40T50

24

Design	In accordance with VDE 0580
Insulation of coil windings	Class H according to IEC 85
Connection	Spade connector in accordance with DIN 43650 form A
Enclosure, IEC 529	IP00 with spade connector, IP20 with protective cap, IP65 with cable plug
Duty rating	Continuous
Plug type	Cable plug (042N0156)

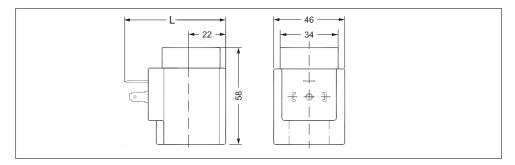
DC

16

±10%

# **Dimensions and weight**

Туре	L without cable plug [mm]	L with protective cap [mm]	L with cable plug [mm]	Weight [kg]
BB	62	77	85	0.24



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018F7397



# BE, High performance coils



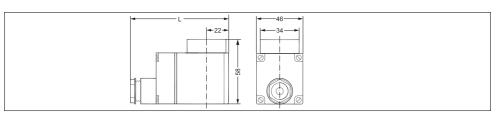
- Enclosure: IP67 for moist environments with terminal box
- In accordance with:
  - RoHS Directive 2011/65/EU
  - Low Voltage Directive 2014/35/EU
  - EN60730-1
  - EN60730-2-8

	T	Supply	V. It.	<b>-</b>	Power cor	sumption	
Туре	Tambient [°C]	voltage [V]	Voltage variation	Frequency [Hz]	[W]	[VA]	Code no.
BE024AS	-40T80	24	-15%, +10%	50	12	21	018F6707
BE048AS	-40T80	48	-15%, +10%	50	11	20	018F6709
BE115AS	-40T80	115	-15%, +10%	50	11	19	018F6711
BE230AS	-40T80	220 – 230	-15%, +10%	50	12	22	018F6701
BE240AS	-40T80	240	-15%, +10%	50	11	19	018F6702
DE 440.CC	40700	380 – 400	-15%, +10%	50	13	23	01056703
BE440CS	-40T80	440	-15%, +10%	60	14	24	018F6703
BE024BS	-40T80	24	-15%, +10%	60	14	25	018F6715
BE115CS	-40T80	100	-15%, +10%	50	11	19	018F6710
DETIOCS	-40180	115	-15%, +10%	60	13	22	0100010
BE220BS	-40T80	220	-15%, +10%	60	13	23	018F6714
DE110CC	-40T50	110	±10%	50	15	28	01056730
BE110CS	-40T50	110	±10%	60	13	22	018F6730
BE230CS	220 - 230 ±10%	±10%	50	17	31	01056733	
	-40T50	220 - 230	±10%	60	14	24	018F6732
BE012DS	-40T50	12	±10%	DC	15	-	018F6756
BE024DS	-40T50	24	±10%	DC	16	-	018F6757

# **Technical data**

Design	In accordance with VDE 0580
Insulation of coil windings	Class H according to IEC 85
Connection	Terminal box
Enclosure, IEC 529	IP67
Duty rating	Continuous
Plug type	Terminal box

Туре	L with terminal box [mm]	L with 1m cable [mm]	Weight [kg]
BE	94	65	0.30





# BF, High performance coils



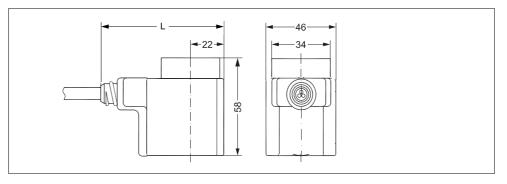
- Enclosure:
   IP67 for moist environments with molded-in cable
- In accordance with:
  - RoHS Directive 2011/65/EU
  - Low Voltage Directive 2014/35/EU
  - EN60730-1
  - EN60730-2-8

		Supply			Power cor		
Туре	Tambient [°C]	voltage [V]	Voltage variation	Frequency [Hz]	[W]	[VA]	Code no.
BF230AS	-40T80	220 – 230	-15%, +10%	50	12	22	018F6251
BF240AS	-40T80	240	-15%, +10%	50	11	19	018F6252
DE 440CC	40700	380 - 400	-15%, +10%	50	14	24	01056353
BF440CS	-40T80	440	-15%, +10%	60	15	24	018F6253
BF024AS	-40T80	24	-15%, +10%	50	12	20	018F6257
DE115CC	40700	100	-15%, +10%	50	11	19	01056360
BF115CS	-40T80	115	-15%, +10%	60	13	22	018F6260
BF220BS	-40T80	220	-15%, +10%	60	14	23	018F6264
BF024BS	-40T80	24	-15%, +10%	60	14	25	018F6265
DE110CC	40750	110	±10%	50	15	29	01056300
BF110CS	-40T50	110	±10%	60	13	23	018F6280
DESSOCI	40750	220 – 230	±10%	50	16	31	01056303
BF230CS	-40T50	220 - 230	±10%	60	14	24	018F6282

#### **Technical data**

Design	In accordance with VDE 0580		
Insulation of coil windings	Class H according to IEC 85		
Connection	1 m 3-core flying lead		
Enclosure, IEC 529	IP67		
Duty rating	Continuous		

	L with 1m cable	Weight
Туре	[mm]	[kg]
BF	67	0.30





# **BG**, High performance coils



- Enclosure: IP67 for moist environments with terminal box
- In accordance with:
  - RoHS Directive 2011/65/EU
  - Low Voltage Directive 2014/35/EU
  - EN60730-1
  - EN60730-2-8

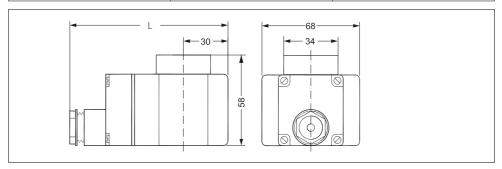
		Supply			Power cor	sumption	
Туре	Tambient [°C]	voltage [V]	Voltage variation	Frequency [Hz]	[W]	[VA]	Code no.
BG024AS	-40T80	24	-15%, +10%	50	11	21	018F6807
BG110AS	-40T80	110	-15%, +10%	50	13	25	018F6811
BG230AS	-40T80	220 - 230	-15%, +10%	50	15	28	018F6801
BG240AS	-40T80	240	-15%, +10%	50	13	25	018F6802
BG400AS	-40T80	380 - 400	-15%, +10%	50	15	29	018F6803
BG024BS	-40T80	24	-15%, +10%	60	15	29	018F6815
BG110BS	-40T80	110	-15%, +10%	60	16	29	018F6813
BG220BS	-40T80	220	-15%, +10%	60	16	29	018F6814
BG012DS	-40T50	12	±10%	DC	20	-	018F6856
BG024DS	-40T50	24	±10%	DC	16	-	018F6857

#### **Technical data**

Design	In accordance with VDE 0580
Insulation of coil windings	Class H according to IEC 85
Connection	Terminal box
Enclosure, IEC 529	IP67
Duty rating	Continuous
Plug type	Terminal box

# Dimensions and weight

Туре	L with terminal box [mm]	Weight [kg]
BG	112	0.50





# BN, High performance coils Hum-free



- Hum-free
- Enclosure:

IP67 for moist environments with flying lead

- In accordance with:
  - RoHS Directive 2011/65/EU
  - Low Voltage Directive 2014/35/EU
  - EN60730-1
  - EN60730-2-8

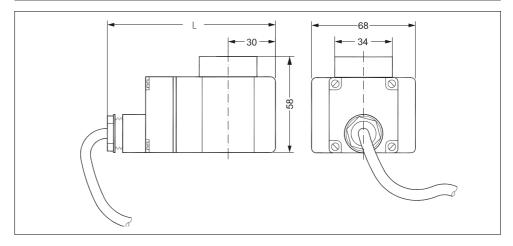
		Supply		_	Power cor	sumption	
Туре	Tambient [°C]	voltage [V]	Voltage variation	Frequency [Hz]	[W]	[VA]	Code no.
BN230CS	-40T50	220 - 230	±10%	50	22	24	018F7301
DINZSUCS	-40130	220 - 230	±10%	60	22	24	01877301

# **Technical data**

Design	In accordance with VDE 0580
Insulation of coil windings	Class H according to IEC 85
Connection	1 m 3-core flying lead
Enclosure, IEC 529	IP67
Duty rating	Continuous

# **Dimensions and weight**

Туре	L with 1m cable [mm]	Weight [kg]
BN	112	0.60





#### BN, High performance coils Center boss



- Enclosure:
  - Center boss for mounting IP65 cable plug in accordance with DIN43650 form A (042N0156)
  - IP67 for moist environments with terminal
- Used with EV215B, EV225B, and EV245B up to 160 °C low pressure steam and max. ambient temperature 40 °C (see additional information in the respective solenoid valve data sheets)
- In accordance with:
  - RoHS Directive 2011/65/EU
  - Low Voltage Directive 2014/35/EU
  - EN60730-1
  - EN60730-2-8
- Mounted with the solenoid valves EV210B, EV220B, EV215B and EV225B, the assembly is UL recognized

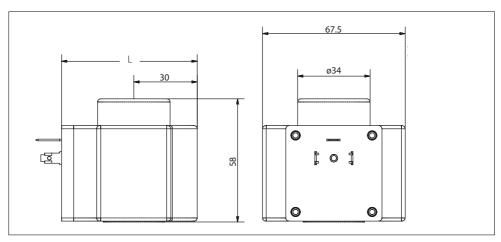
		Supply			Power consumption			
Туре	Tambient [°C]	voltage [V]	Voltage variation	Frequency [Hz]	[W]	[VA]	Approval	Code no.
BN024DS	-40T50	24	±10%	DC	20	-	c <b>FL</b> °us	018F6968

#### **Technical data**

Design	In accordance with VDE 0580
Insulation of coil windings	Class H according to IEC 85
Connection	Cable plug in accordance with DIN43650 form A or terminal box
Enclosure, IEC 529	IP65, IP67
Duty rating	Continuous

# **Dimensions and weight**

Туре	L [mm]	Weight [kg]
BN	64	0.47





# **BO, High performance coils**



- ATEX Zone 1
- Enclosure:

IP67 seal kit for moist environment included

- Approved in accordance with
  - ATEX 2014/34/EU
  - Ex mb IIC T4 Gb
  - ITS 09 ATEX 16835X
- Media temperature: Up to 90 °C

		Supply			Power cor	nsumption	
Туре	Tambient [°C]	voltage [V]	Voltage variation	Frequency [Hz]	[W]	[VA]	Code no.
BO024C	-40T60	24	±10%	50 / 60	10	21	018Z6595
BO110C	-40T60	110	±10%	50 / 60	10	21	018Z6593
BO230C	-40T60	230	±10%	50 / 60	10	21	018Z6592
BO240C	-40T60	240	±10%	50 / 60	10	21	018Z6591
BO024D	-40T60	24	±10%	DC	10	-	018Z6596

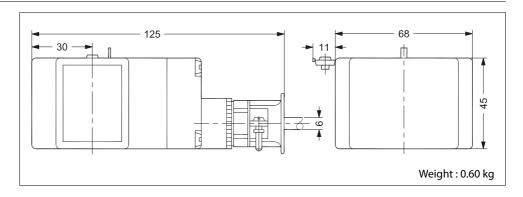
#### **Technical data**

Insulation of coil windings	Class H according to IEC 85
Connection	5 m 3 x 0.75 mm <sup>2</sup> flexible cord
Enclosure, IEC 529	IP67 including seal kit
Media temperature	-40 °C − +90 °C
Duty rating	Continuous
Humidity	0 – 100%
Pollution degree	3 (EN60730-1)
Impulse withstand voltage	2.5 kV (EN60730-1)

# Accessory

Description	Application	Code no.
Seal kit (included as standard)	Wet environment (pollution degree 3)	018Z0090

# **Dimensions and weight**





# BJ, High performance coils Junction box



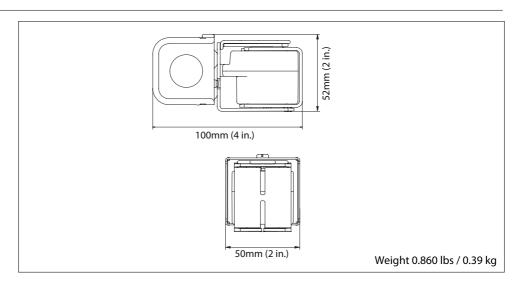
- Enclosure: IP30 / NEMA 2
- For UL listed valves (UL 429 and CSA)
- Ambient temperature: Up to 50 °C / 122 °F
- Media temperature: Up to 185 °C / 364 °F steam

			Supply		Power	Wire I	ength	
Valve type	Coil type	Voltage tolerance	voltage [V]	Frequency [Hz]	consumption [W]	[in.]	[cm]	Code no.
EV220B 6-50	BJ024CS	±10%	24	50 / 60	14	7	18	018F4100
EV210B EV215B	BJ120CS	±10%	110 120	50 / 60 60	16 15	7	18	018F4110
EV225B EV250B	BJ240CS	±10%	208 – 240 230	60 50	14 17	7	18	018F4120

# **Technical data**

Design	In accordance with UL 429
Power consumption, cut in	49 VA
Insulation of coil windings	Class H according to IEC 85
Connection	Junction box
Enclosure, IEC 529	Junction box NEMA 2 ~ IP12-30
Ambient temperature	-40 – 50 °C / -40 – 122 °F

# Dimensions and weight



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# BX, High performance coils Conduit hub



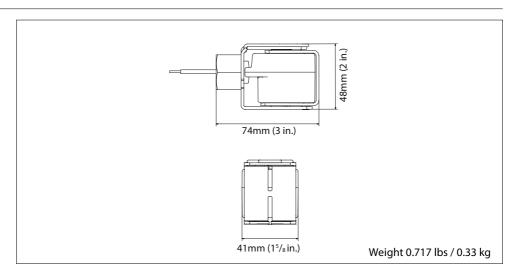
- Enclosure: IP54 / NEMA 4
- For UL listed valves (UL 429 and CSA)
- Ambient temperature: Up to 50 °C / 122 °F
- Media temperature: Up to 185 °C / 364 °F steam

			Supply		Power	Wire I	ength	
Valve type	Coil type	Voltage tolerance	voltage [V]	Frequency [Hz]	consumption [W]	[in.]	[cm]	Code no.
	BX024CS	±10%	24	50 / 60	14	18	46	018F4102
	BX024CS	±10%	24	50 / 60	14	71	180	018F4103
EV220B 6-50	BX024CS	±10%	24	50 / 60	14	98	250	018F4104
EV220B 6-30	BX120CS	±10%				18	46	018F4112
EV215B	BX120CS	±10%	110	50 / 60	16	36	91	018F4113
EV225B	BX120CS	±10%	120	20 60	15	71	180	018F4114
EV250B	BX120CS	±10%				98	250	018F4115
	BX240CS	±10%	208 – 240	60	14	18	46	018F4122
	BX240CS	±10%	230	50	17	98	250	018F4123

#### **Technical data**

Design	In accordance with UL 429
Power consumption, cut in	49 VA
Insulation of coil windings	Class H according to IEC 85
Connection	Conduit hub
Enclosure, IEC 529	Conduit hub NEMA 4 ~ IP54
Ambient temperature	-40 − 50 °C / -40 − 122 °F

# **Dimensions and weight**



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# BY, High performance coils



- Enclosure: Up to IP65 / NEMA 4
- For UL recognised valves calves
- In accordance with:
  - RoHS Directive 2011/65/EU
  - Low Voltage Directive 2014/35/EU
  - EN60730-1
  - EN60730-2-8

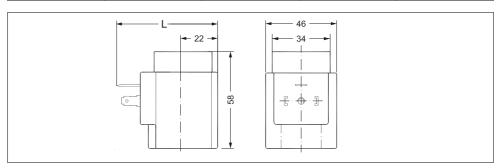
		Supply		_	Power con	sumption		
Туре	Tambient [°C]	voltage [V]	Voltage variation	Frequency [Hz]	[W]	[VA]	Approval	Code no.
DV024CC	40750	24	±10%	50	14	26	c <b>FL</b> L us	018F7655
BY024CS -40T50	24	±10%	60	12	21	C The US	018F/033	
DV240CC	40750	230	±10%	50	16	32	<b></b>	01057650
BY240CS	-40T50	208 - 240	±10%	60	14	28	c <b>FLL</b> us	018F7658
DV120CC	40750	110	±10%	50	14	27		01057663
BY120CS	-40T50	110 – 120	±10%	60	14	27	c <b>FL</b> °us	018F7663

#### **Technical data**

Design	In accordance with VDE 0580
Insulation of coil windings	Class H according to IEC 85
Connection	Spade connector in accordance with DIN 43650 form A
Enclosure, IEC 529	Up to IP65 / NEMA 4
Plug type	Cable plug (042N0156)

#### **Dimensions and weight**

Туре	L without cable plug [mm]	L with protective cap [mm]	L with cable plug [mm]	Weight [kg]
BY	62	77	85	0.24





# **BQ**, High performance coils



- Enclosure: Up to IP65 / NEMA 4
- Max. media temperature: 185 °C steam
- For UL recognised valves calves
- In accordance with:
  - RoHS Directive 2011/65/EU
  - Low Voltage Directive 2014/35/EU
  - EN60730-1
  - EN60730-2-8

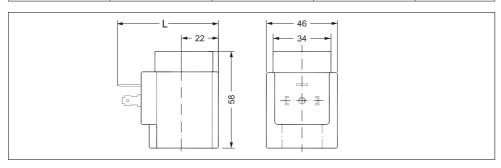
	_	Supply	_		Power con	sumption			
Туре	Tambient [°C]	voltage [V]	Voltage variation	Frequency [Hz]	[W]	[VA]	Approval	Code no.	
DO03466	40740	24	-15%, +10%	50	10	17	c <b>FL</b> °us	018F4517	
BQ024CS	-40T40	24	-15%, +10%	60	9.0	16	c <b>714</b> us	U18F4517	
BQ120BS	-40T40	110/120	-15%, +6%	60	13.5	19	c <b>FL</b> °us	018F4519	
DO340CC	40740	230	-15%, +6%	50	10	17		018F4511	
BQ240CS -40T40		-40T40	208/240	-6%, +6%	60	9.5	16	c <b>FL</b> us	018F4511

#### **Technical data**

Design	In accordance with VDE 0580
Insulation of coil windings	Class H according to IEC 85
Connection	Spade connector in accordance with DIN 43650 form A
Enclosure, IEC 529	Up to IP65 / NEMA 4
Plug type	Cable plug (042N0156)

#### **Dimensions and weight**

Туре	L without cable plug [mm]	L with protective cap [mm]	L with cable plug [mm]	Weight [kg]
BQ	62	77	85	0.24





#### AM coil



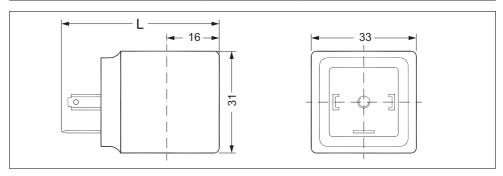
- Cable plug enclosure:
  - IP00 version with DIN 43650 A spade connectors
  - IP20 version with protective cap
  - IP65 version with cable plug
- In accordance with:
  - RoHS Directive 2011/65/EU
  - Low Voltage Directive 2014/35/EU
  - EN60730-1
  - EN60730-2-8

		Supply		Power		sumption	
Туре	Tambient [°C]	voltage [V]	Voltage variation	Frequency [Hz]	[W]	[VA]	Code no.
AM024C	-40T50	24	±10%	60	5.5	11	042N0842
AIVIU24C	-40150	24	±10%	50	7.5	14	042110842
AA4110C	40750	110	±10%	60	5.5	11	0.42N0045
AM110C	-40T50	110	±10%	50	7.5	14	042N0845
AM220C	-40T50	230	±10%	60	6.5	13	0.42N0040
AM230C	-40150	230	±10%	50	9.5	18	042N0840
AAA240C	40750	240	±10%	60	5.5	11	0.420100.44
AM240C	-40T50	240	±10%	50	7.5	15	042N0841
AM012D	-40T50	12	±10%	DC	8.5	-	042N0848
AM024D	-40T50	24	±10%	DC	9.0	-	042N0843

# **Technical data**

Design	In accordance with VDE 0580
Power consumption, cut in	22.5 VA AC coils only
Insulation of coil windings	Class H according to IEC 85
Connection	Spade connector in accordance with DIN 43650 form A
Enclosure, IEC 529	IP00 with spade connector, IP65 with cable plug
Duty rating	Continuous
Plug type	Cable plug (042N0156)

Туре	L without cable plug [mm]	L with cable plug [mm]	L with protective cap [mm]	Weight [kg]
AM	48	72	64	0.10





# AP, Compact UL recognised coils



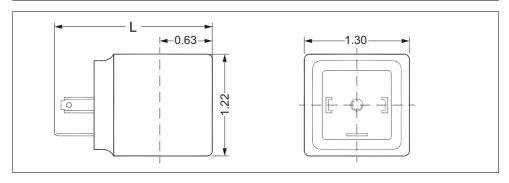
- Cable plug enclosure:
  - IP00 version with DIN 43650 A spade connectors
  - IP20 version with protective cap
  - IP65 version with cable plug
- For UL recognised valves callus
- Ambient temperature: Up to 50 °C / 122 °F
- In accordance with:
  - RoHS Directive 2011/65/EU
  - Low Voltage Directive 2014/35/EU
  - EN60730-1
  - EN60730-2-8

	_	Supply	_		Power cor	sumption		
Туре	Tambient [°C / °F]	voltage [V]	Voltage variation	Frequency [Hz]	[W]	[VA]	Approval	Code no.
AP240C	-40T50 /	208 – 240	±10%	60	5.5	11		0.42814101
AP240C	-40T122	230	±10%	50	7.5	15	c <b>FL</b> °us	042N4191
AP120B	-40T50 / -40T122	110 – 120	±10%	60	5.0	11	c <b>'911</b> "us	042N4192
AP024B	-40T50 / -40T122	24	±10%	60	5.0	11	c <b>91</b> 2°us	042N4193

#### **Technical data**

Design	In accordance with VDE 0580
Insulation of coil windings	Class H according to IEC 85
Connection	Spade connector in accordance with DIN 43650 form A
Enclosure, IEC 529	IP00 with spade connector, IP65 / NEMA 2 with cable plug
Duty rating	Continuous
Plug type	Cable plug (042N0156)

Туре	L without cable plug [in]	L with cable plug [in]	L with protective cap [in]	Weight [kg / lbs]
AP	1.89	2.83	2.52	0.10 / 0.22





#### **Cable plug**

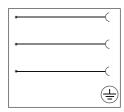


- Enclosure: Up to IP65
- For use with Danfoss coils type AL, AM, AS, AZ, BA, BB, BD, BN (Center boss), BQ, and BY
- AC / DC all voltages up to  $250\,V$
- Approved in accordance with: c us

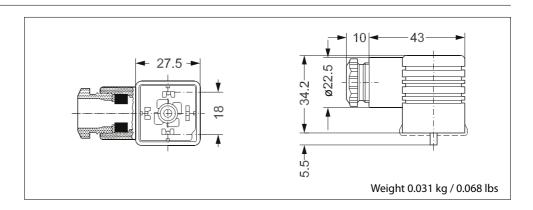
  - CSA
  - VDE

Cable plug size	Description	Suitable for coil types	Code no.
DIN 18	Cable plug according to DIN 43650-A PG 11	AL, AM, AS, AZ, BA, BB, BD, BN (Center boss), BQ, BY	042N0156

#### **Technical data**



Type	GDM 2011 J (Grey)			
Design	DIN 43650-A			
Cable gland	PG 11			
Poles	2 + PE			
Max. voltage	250 V AC / DC			
Approvals	c Nus CSA, VDE			
Enclosure	IP65 (IEC 60529)			
Max. operating current	16 A			
Contact resistance	< 10m Ω			
Cable diameter	Ø4.5 – 11 mm			
Wire cross section	Max. 1.5 mm <sup>2</sup>			
Ambient temperature	-30 – 90 °C / -22 – 194 °F			
	Contacts: CuSn (Tin plated)			
Materials	Terminal block:	PA 6 GF		
Matchais	Profiled gasket:	NBR		
	Housing:	PA 6 GF		





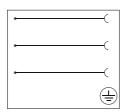
#### **Cable plug**



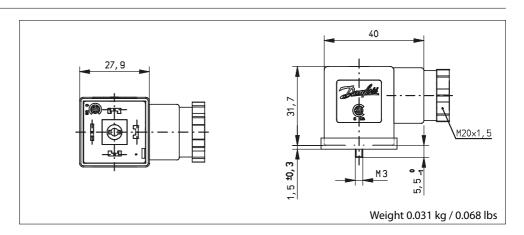
- Enclosure: Up to IP65
- For use with Danfoss coils type AL, AM, AS, AZ, BA, BB, BD, and BY
- AC / DC all voltages up to 250 V
- Approved in accordance with: CSA
- In accordance with:
  - RoHS 2011/65/EU
  - LVD 2014/35/EU

Cable plug size	Description	Suitable for coil types	Code no.
DIN 18	Cable plug with form A	AL, AM, AS, AZ, BA, BB, BD, BY	042N0178

# **Technical data**



Design	EN 175301-803 Form A			
Cable gland	PG 11	PG 11		
Poles	2 + PE			
Max. voltage	250 V AC / DC			
Approvals	CSA			
Enclosure	IP65			
Max. operating current	16 A			
Contact resistance	< 4m Ω			
Cable diameter	Ø6 – 8 / 8 – 10 mm			
Wire cross section	Max. 1.5 mm <sup>2</sup>			
Ambient temperature	-25 − 80 °C / -13 − 176 °F			
	Contacts:	CuZn, Cu/Sn - plated		
Materials	Terminal block:	PA 6 GF		
Iviatellais	Profiled gasket:	NBR		
	Housing:	PA 6 GF		





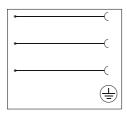
#### **Industrial plug**



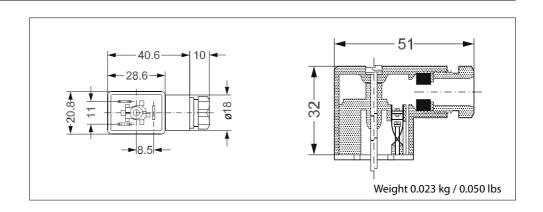
- Enclosure: Up to IP65
- For use with Danfoss coils type AB and AC
- AC / DC all voltages up to 250 V
- Approved in accordance with:
  - c**71**°us
  - CSA

Industrial plug size	Description	Suitable for coil types	Code no.
DIN 11	Cable plug for 6.3 x 0.8 mm spade connectors	AB, AC	042N0139

#### **Technical data**



Туре	GM 209 J (Black)		
Design	DIN 43650-B		
Cable gland	PG 9		
Poles	2 + PE		
Max. voltage	250 V AC / DC		
Approvals	c PL us CSA		
Enclosure	IP65 (IEC 60529)		
Max. operating current	16 A		
Contact resistance	< 10m Ω		
Cable diameter	Ø4.5 – 7 mm		
Wire cross section	Max. 1.5 mm <sup>2</sup>		
Ambient temperature	-30 – 90 °C / -22 – 194 °F		
	Contacts: CuSn (Tin plated)		
Materials	Terminal block:	PA 6 GF	
	Flat gasket:	NBR	
	Housing:	PA 6 GF	





# Cable plug (LED + Varistor)

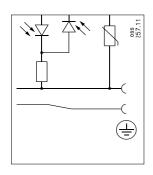


- Enclosure: Up to IP65
- For use with Danfoss coils type AM, AK, AL, AS, AZ, BA, BD, BB, and BY
- 24 V AC / DC and 230 V AC version
- DIN 18
- Approved in accordance with: CSA
- In accordance with:
  - RoHS 2011/65/EU
  - LVD 2014/35/EU

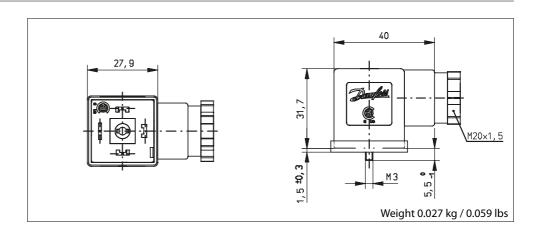
Cable	Vol	tage	Voltage		LED	Built-in VDR <sup>1</sup> )	
plug size	[V AC]	[V DC]	variation	Suitable for coil types	colour	resistor	Code no.
DIN 18	24	24	±10%	AM, AL, AS, AZ, BA, BB, BD, BY	Red	Yes	042N0263
DIN 18	230	-	±10%	AM, AL, AS, AZ, BA, BB, BD, BY	Red	Yes	042N0265

<sup>1)</sup> Protects against voltage peaks

#### **Technical data**



Design	EN 175301-803 A		
Power consumption	Max. 5 mA		
Approval	CSA		
Enclosure	IP65 (IEC 60529)		
Max. operating current	1.5 A clamping contact		
Contact resistance	$\leq 4m \Omega$		
Protection against wrong polarity	Yes		
Cable diameter	6 – 8 mm and 8 – 10 mm		
Wire cross section	Max. 1.5 mm <sup>2</sup>		
Ambient temperature	-25 – 60 °C / -13 – 140 °F		
	Contacts:	CuZn, Cu/Sn-plated	
	Terminal block:	PA6 + 30% FG, black	
Materials	Flat gasket:	NBR LABS-free	
	Housing:	PA6	
	Wire holder:	PA6.6 + 50% FG P7,5 black	





# Industrial plug (LED + Varistor)

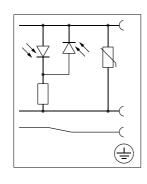


- Enclosure: Up to IP65
- For use with Danfoss coils type AB and AC
- 24 V AC
- Approved in accordance with: CSA
- In accordance with:
  - RoHS 2011/65/EU
  - LVD 2014/35/EU

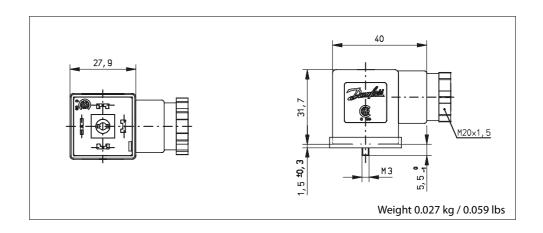
Industrial	Voltage		Suitable for		Built-in VDR <sup>1</sup> )	
plug size	[V AC]	[V DC]	coil types	LED colour	resistor	Code no.
DIN 11	24	24	AB, AC	Red	Yes	042N0267

<sup>1)</sup> Protects against voltage peaks

# **Technical data**



Design	Industrial form		
Supply voltage variation	±10%		
Power consumption	Max. 5 mA		
Approval	CSA		
Enclosure	IP65 (IEC 60529)		
Max. operating current	1.5 A clamping contact		
Contact resistance	$\leq 4 \text{m} \Omega$		
Protection against wrong polarity	Yes		
Cable diameter	5 – 6 mm and 6 – 9 mm		
Wire cross section	Max. 1 mm <sup>2</sup>		
Ambient temperature	-25 – 60 °C / -13 – 140 °F		
	Contacts:	CuZn, Cu/Sn-plated	
	Terminal block:	PA6 + 30% FG, black	
Materials	Flat gasket:	NBR LABS-fre	
	Housing:	PA6	
	Wire holder:	PA6.6 + 50% FG P7,5 black	





# Universal electronic multi-timer Type ET 20 M



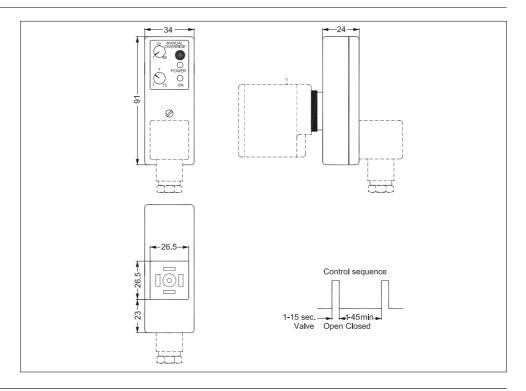
- Outside adjustments
- Light weight and small size
- External adjustable timing from 1 minute to 45 minutes with 1 to 15 seconds drain open
- One solid state timer fits all coil voltages from 24-240 V AC
- Light diodes for indication
- All in one unit
- Manual override (test button).

Туре	Voltage [V]	Suitable for coil types	Code no.
BA024A	24 – 240	AL, AM, AS, AZ, BA, BD, BB	042N0185

#### **Technical data**

Туре	ET 20 M
Voltage	24 – 240 V AC / 50 – 60 Hz
Power rating	Max. 20 W
Enclosure	IP00, IP65 with cable plug
Electrical connection	DIN connector (DIN 43650-A)
Ambient operating temperature range	-10 − 50 °C
Function	Start with pulse
Interval timer	0 – 45 min.
"On" timer	0 – 15 sec.

# **Dimensions and weight**



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