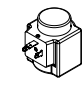
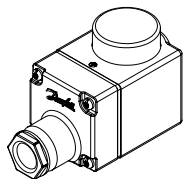


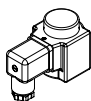
Installation guide

Solenoid coil

Types BB, BE, BF, BG, and BN



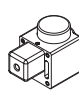
BB
Spade
10 W V AC /
18 W V DC /
special power
consumption



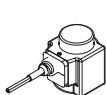
BB
Plug
10 W V AC /
18 W V DC /
special power
consumption



BE
Terminal box
10 W V AC /
18 W V DC /
special power
consumption



BE
DIN spade +
protection cap
10 W V AC /
18 W V DC /
special power
consumption



BF
Cable
10 W V AC /
18 W V DC /
special power
consumption



BG
Terminal box
20 W V DC /
special power
consumption



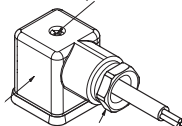
BG
Terminal box
12 W V AC /
special power
consumption



BN
Terminal box
Special
version incl.
20 W V AC
hum-free

01819666

50 – 60 Ncm (0.39 – 0.44 lb-ft)



40 – 50 Ncm PG 11
(0.30 – 0.39 lb-ft) 250 – 375 Ncm
(1.84 – 2.77 lb-ft)

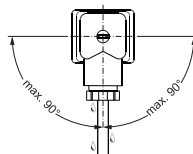
Max. 8 mm (0.31 in)



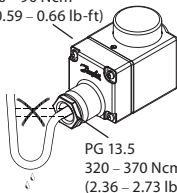
Min. 4 mm (0.16 in)



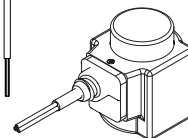
Cable strain relief



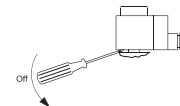
Torx TX10
80 – 90 Ncm
(0.59 – 0.66 lb-ft)



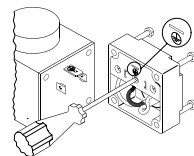
PG 13.5
320 – 370 Ncm
(2.36 – 2.73 lb-ft)

 $r > 55 \text{ mm}$ (2.16 in)


On



Philips bits no. 1
40 – 50 Ncm (0.30 – 0.39 lb-ft)



ENGLISH	
Type of control	1
Safety classification	Class I
Ambient temperature	10 – 12 W V AC NC valve -40 – 80 °C (-40 – 176 °F) 10 – 12 W V AC NO valve -40 – 55 °C (-40 – 131 °F) 10 W dual frequency -40 – 50 °C (-40 – 122 °F) 20 W V AC -40 – 50 °C (-40 – 122 °F) 18 – 20 W V DC -40 – 50 °C (-40 – 122 °F)
Humidity	0 – 100% R.H. (0 – 97% R.H. non-condensation condition if IP level is below IPX5/NEMA X4)
Voltage variation	10 – 12 W single frequency -15% – 10% 10 W dual frequency -10% – 10% 20 W V AC -15% – 10% 18 – 20 W V DC -10% – 10%
Ball pressure test	200 °C (392 °F)
Impulse withstand voltage	Terminal box 4.0 kV at altitude <4000 m (13123 ft) Cable 4.0 kV at altitude <4000 m (13123 ft) Spade 4.0 kV at altitude <4000 m (13123 ft) Plug 3.1 kV 2000 m<altitude<4000 m (6561 ft) Protection cap 4.0 kV at altitude <4000 m (13123 ft)
Enclosure rate IPXX Pollution degree PDX	Terminal box IP67 PD4 Cable IP67 PD4 Plug IP65 PD3 Spade IP00 PD3 Protection cap IP20 PD3
Installation	Integrated control Incorporated control Independently mounted control (IP65 and IP67)
Suitable cable and conductor size for plug and terminal box	ø6.6 – ø11 mm (ø0.26 – ø0.43 in) 0.75 – 1.5 mm ² (21 – 15 AWG flexible cord)
Number of mating for plug	10 times
Cable size Cable conductor size	ø6.6 mm (ø0.26 in) 3 x 0.75 mm ² (3 x 0.001 in ²) Installation and handling for cable: > 5 °C (41 °F)
 - Only qualified personnel is allowed to install or maintain this product - Disconnect the power when dismantling the coil - Avoid direct exposure to alkaline conditions, use in neutral conditions is recommended - Ensure that the O-ring is in place on the valve - If the coil is used as independently mounted control, the end-user shall use a plastic cable gland with strain relief Special note for R152A, R32, R290, R600, R600a, R1234yf, and R1234ze: The 13.5 mm coil (IP65/67) is validated in accordance to ISO 5149, IEC 60335 (ref. IEC/EN 60079-15). Ignition risk is evaluated in accordance to ISO 5149 and IEC 60335 (ref. IEC/EN 60079-15). Please make sure that there is no spark, arc on the spade connection during the application. Always install a fuse ahead of the coil: rated current: two times of rated current, time lag: medium, to avoid short circuit. The coil used in an area of not more than pollution degree 2.	
Follow the installation guide to mount the coil correctly, and apply O-ring for sealing to prevent moisture penetrating inside the coil. Safety note: The 13.5 mm coil (IP65/67) can be applied on systems with R152A, R32, R290, R600, R600a, R1234yf, and R1234ze as the working fluid. For countries where safety standards are not an indispensable part of the safety system Danfoss recommends the installer gets a third party approval of any system containing flammable refrigerant. Please follow specific selection criteria stated in the datasheet for these particular refrigerants. Note that 13.5 mm coil (IP65/67) has NOT been verified ATEX or IECEx or IEC 60079 series zone 2 compliant. The product is only validated for systems in compliance with ISO 5149, IEC 60335 (ref. IEC/EN 60079-15). It is the responsibility of the user to verify such compliance. Improper use can cause explosion, fire, leakage potentially causing death, personal injury, or damage to property.	

