

Data Sheet

Danfoss Link™ DBR Boiler Relay with ESM-11 temperature sensor

Application



The *Danfoss Link™* DBR boiler relay is a device for turning gas and oil boilers ON / OFF, depending on heating demands.

The *Danfoss Link™* DBR must in applications with bypass valve such as AVDO, be installed in combination with the ESM-11 temperature sensor (included inside the box) for turning the boiler ON/OFF based on heating demand and water temperature in return pipe for running the system at optimal energy efficiency.

The ESM-11 temperature sensor has a spring contact surface to ensure a good heat transfer on pipes of all sizes. The ESM-11 temperature sensor is a two-wire device.

The *Danfoss Link™* DBR boiler relay is a mains powered device and will act as a repeater in order to improve the wireless performance of the *Danfoss Link™* network.

The DBR boiler relay is part of the *Danfoss Link™* system, which is used for wireless linking and controlling of heating systems in residential and light commercial buildings.

Ordering

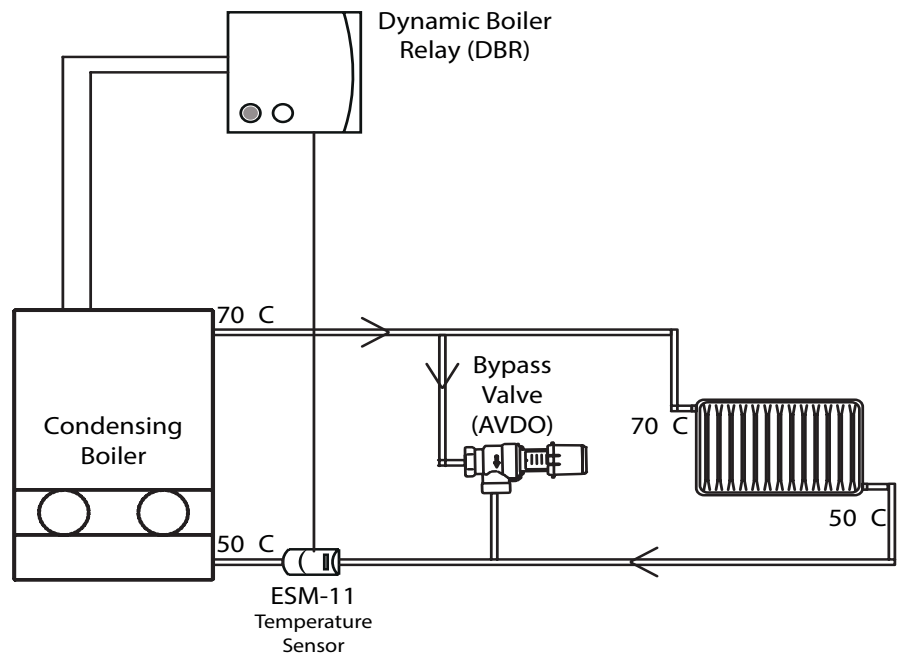
Product	Code no.
<i>Danfoss Link™</i> DBR boiler relay	014G0279
ESM-11 Replacement temperature sensor	087B1165
Plastic ties for ESM-11 (25 pcs)	087B1167

Technical Data

Danfoss Link™ DBR	Specifications
Operation voltage	230 V~, 50 Hz
Standby consumption	1.6 W
Load	3 A resistive 1 A inductive
Rated impulse	2.5 kV
Switching	Type 1B
Regulation	ON / OFF
Ambient temperature	0 °C to 45 °C
Transmission frequency	Wireless Z-wave 868.42 MHz
Transmission range in normal buildings	Up to 30 m
Transmission power	Max. 1 mW
Pollution situation	Degree 2
Ball pressure test	75 °C
Software classification	Class A
Software Version	4.1.0 or higher
IP class	40
Dimensions	84 x 84 x 30 mm

ESM-11	Specifications
Temperature range	0-100 °C
Enclosure IP class	IP 32
Time constant	3 s
Materials	Cover: ABS Base: PC (polycarbonate)
Electrical connection	Terminal block for 2 wires in base part
Mounting	Clamp for tube DN 15-65 supplied
Dimensions	28x 26 x 55 mm

Installation



In installations with bypass using AVDO, remember to mount and wire the ESM-11 Temperature Sensor included in the pack.

Figure 1

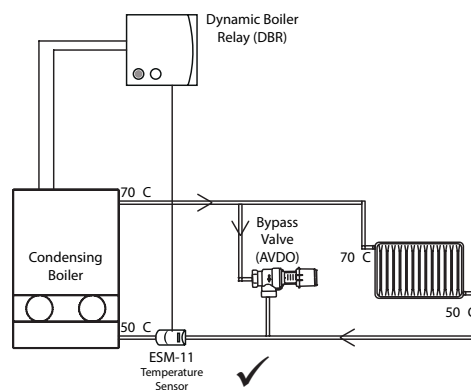
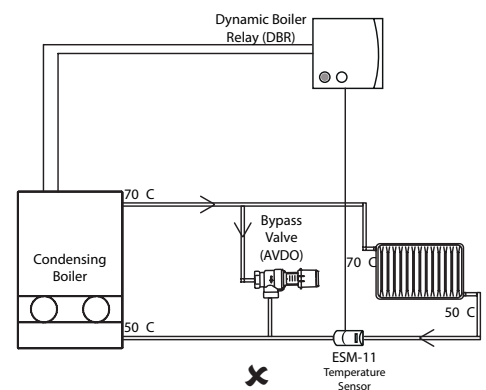
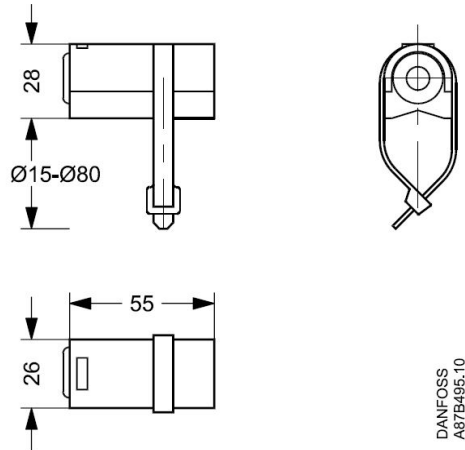
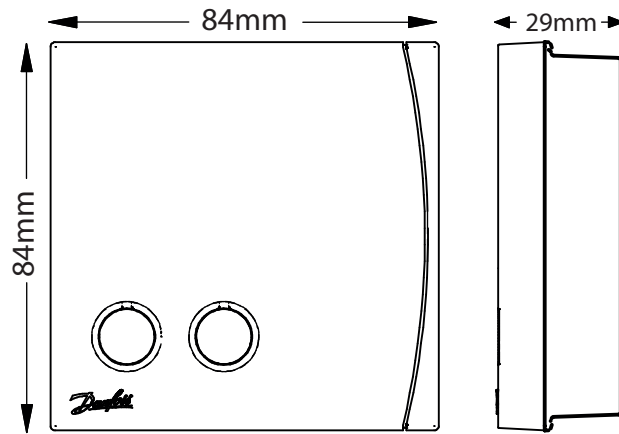


Figure 2

**Note:**

- The ESM-11 Temperature Sensor needs to be mounted on the return pipe.
- Mount the ESM-11 Temperature Sensor in the bypass circuit (figure 1) and not outside of the circuit (figure 2). Pay attention that the ESM-11 must be outside the circuit of an eventual storage tank.

Dimensions



Danfoss A/S
Residential Heating
Haarupvaenget 11
8600 Silkeborg
Denmark
Phone: +45 7488 8000
Fax: +45 7488 8100
Email: heating.solutions@danfoss.com
www.heating.danfoss.com