

## WIRELESS I/O MODULE RYFL

RYFL is a wireless I/O module which can be used to transfer measurements and control information. Communicating between the control system and I/O module is done through FLTA base station Modbus connection. Two input signals can be forwarded and two outputs can be controlled with RYFL module.

Inputs can be set to function as 0...10 V inputs or potential free inputs. Outputs can be set to function as relay outputs or 0...10 V outputs. The PWM outputs functions according to the 0...10 V outputs. Additionally, the 24 Vac supply outputs can be used for transmitters, for example.

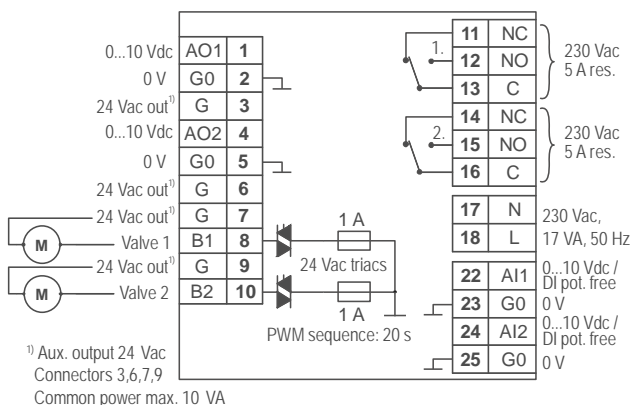
There is a two-way communication between the I/O modules and the base station. RYFL transmits the changed information to the base station at 6 s interval. RYFL I/O module needs a FLAN antenna.

**NOTE:** RYFL must be placed sufficiently close to FLTA base station, because RYFL doesn't support repeaters.

If the connection to base station is lost over an hour, the thermal actuator outputs and relay outputs are controlled to off mode and the 0...10 V outputs to 0 V. The outputs are restored, when the connection is established again.

The module is aware of the network functions and informs the possible network problems and service needs with indicator lights. The same error information is delivered to FLTA base station which can forward the information to the building management system.

### Wiring (230 V model)



**IMPORTANT:** When the relay outputs are used with 230 Vac voltage, the outputs must be equipped with a fast fuse (max 5 A) that is in accordance with the standard IEC 60127-2.

**NOTE:** Connecting relay output 1 & 2 to SELV system is forbidden, when 230 V operating voltage is used. When using 24 V operating voltage, there must be used a same type of voltage to the relay outputs (24 Vac or 230 Vac).



### Technical data

Supply	230 Vac, 17 VA or 24 Vac, 4 VA
Frequency	868.30 MHz Class 1
Range	500 m in line of sight 20...100 m in buildings
Transmission power	+8 dBm
Reception sensitivity	-109 dBm
Modulation	FSK
Inputs	2 x 0...10 Vdc or potential free contact
Outputs	2 x 230 Vac relay, 5 A res. 2 x 0...10 Vdc 2 x 24 Vac, 1 A, seq. approx. 20 s
Supply voltage	4 x 24 Vac, < 10 VA
Input and output accuracy	±0.5 %
Operating conditions	
temperature	-40...+50 °C
humidity	0...100 % RH (non cond.)
Housing	PC plastic, IP54
Dimensions (w x h x d)	145 x 210 x 110 mm

### Ordering guide:

Model	Product number	Description
RYFL	1191130	wireless I/O module, 230 Vac
RYFL-24	1191131	wireless I/O module, 24 Vac
FLAN	1191040	antenna
FLANJJ-4,5	1191041	antenna extension cable (4.5 m)