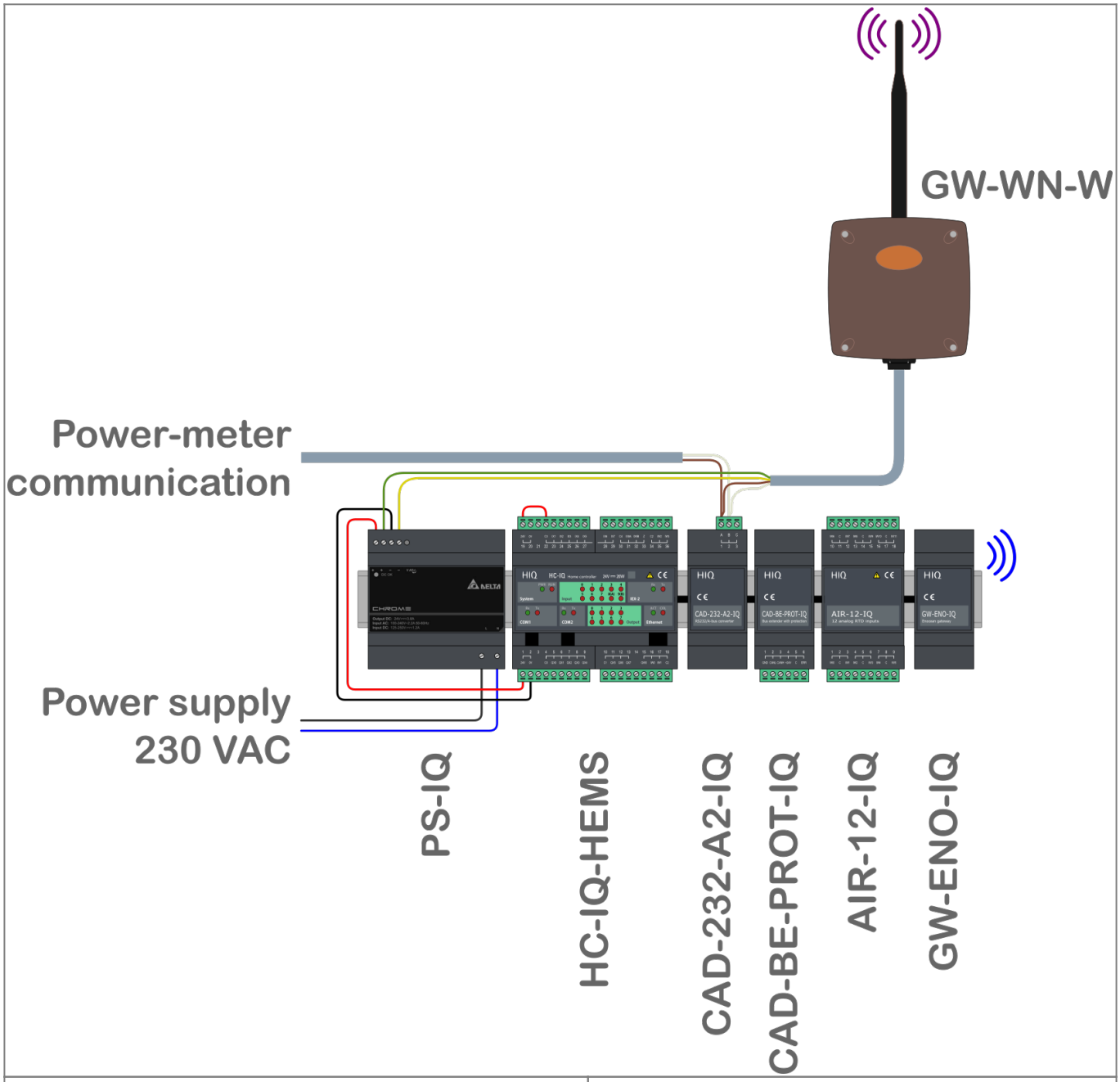
GOFLEX HEMS wiring

Control distribution-board wiring

Control system and Communication interfaces wiring



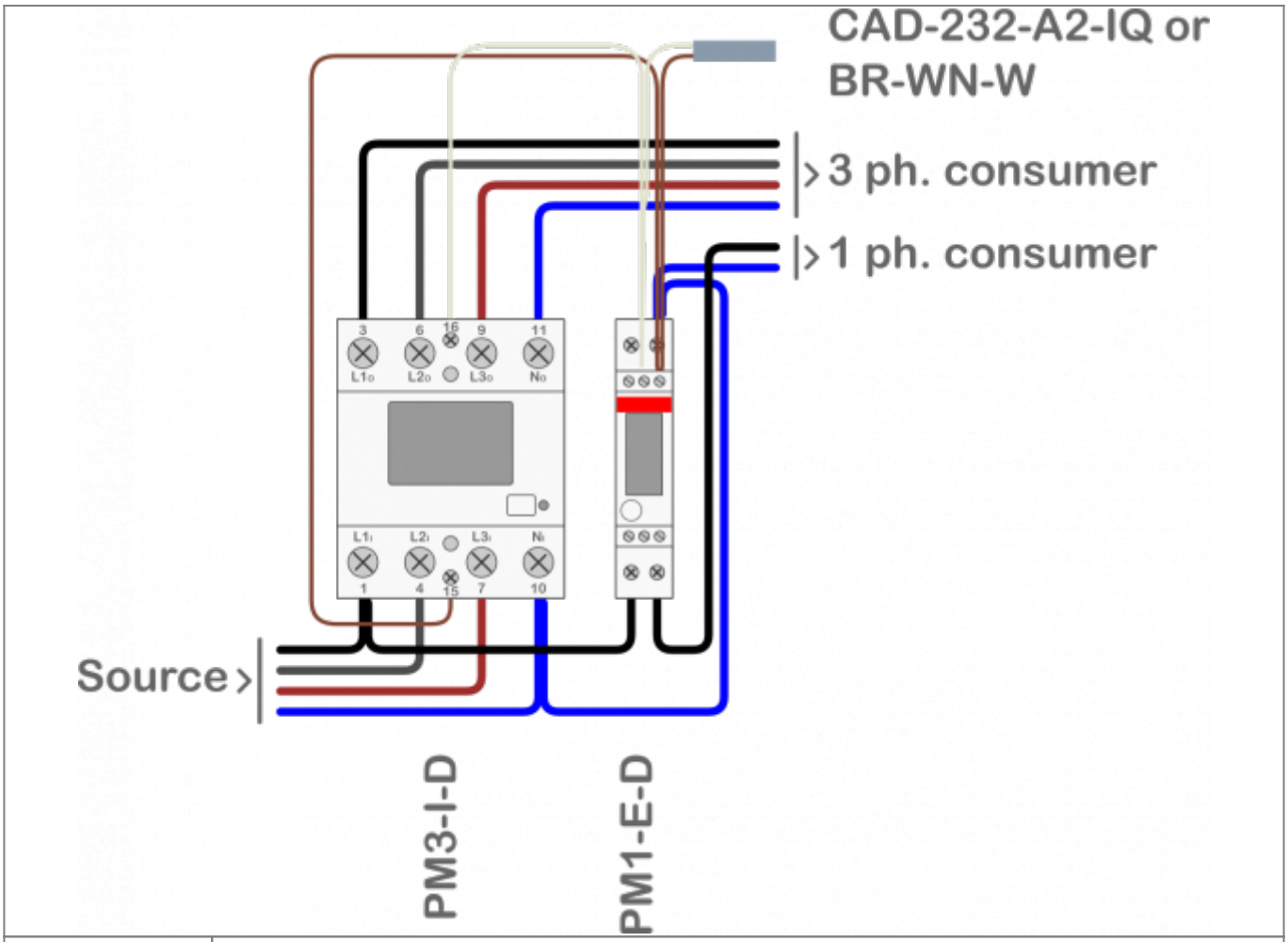
PS-IQ	**DIN rail**
L, N	to 230 VAC power supply
+, -	to **HC-IQ** 24V, 0V (1, 2)
+, -	to **GW-WN-W** +, -

HC-IQ	**DIN rail**
24V (1), 0V (2)	to **PS-IQ** +, -
C0 (4), C1 (10)	Power relays supply

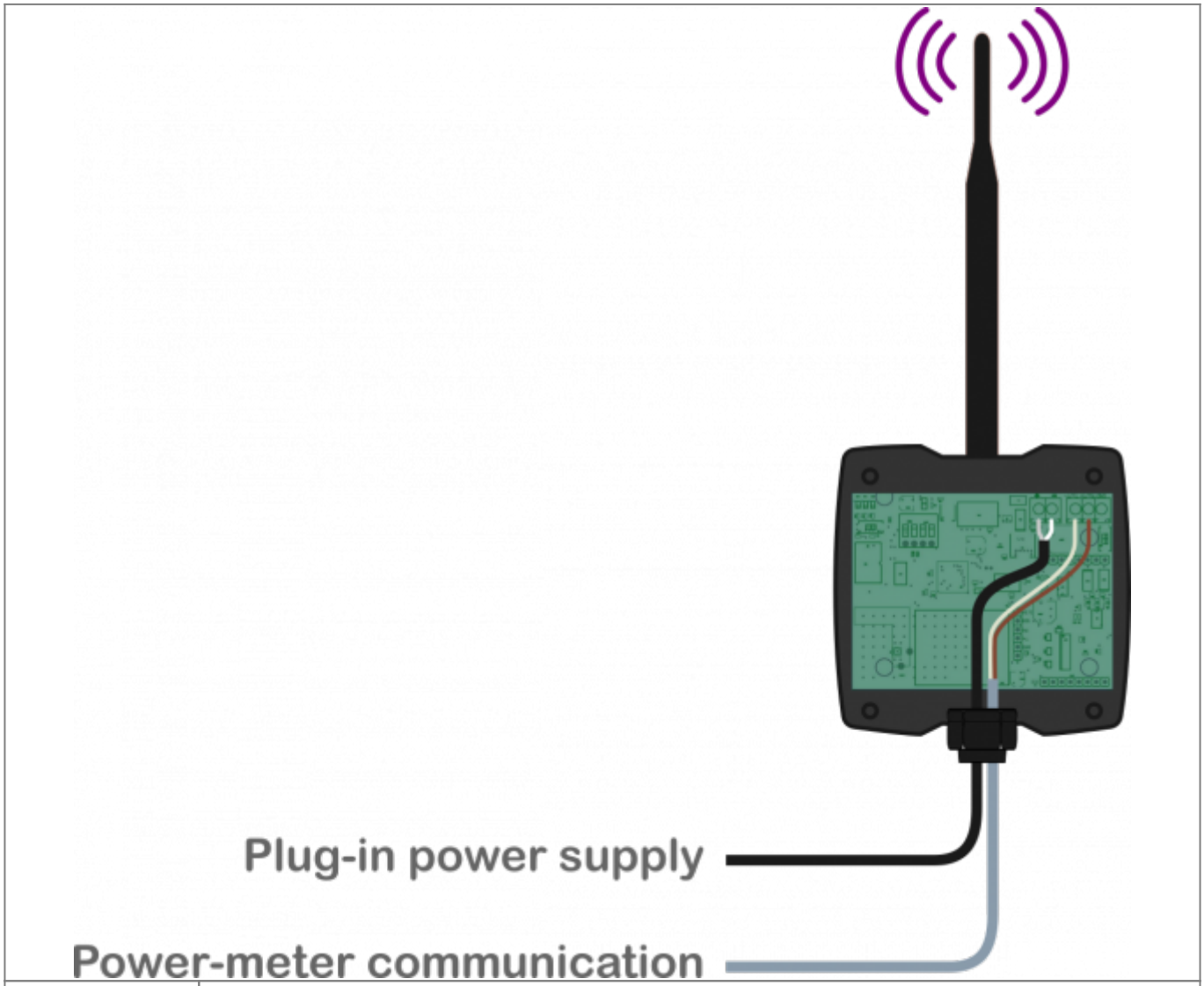
QX0-QX7 (5-9, 11-13)	Managed loads power relays
24V (19)	to **HC-IQ** C3 (22)
0V (20)	to push-buttons common
IX1-IX7 (23-29)	to push-button
RJ10 (right side)	to next DIN rail module
CAD-232-A2-IQ	**DIN rail**
A (1), B (2), C (3)	RS485 bus to power-meters and to **GW-WN-IQ**
RJ10 (left side)	to previous DIN rail module
RJ10 (right side)	to next DIN rail module
CAD-BE-PROT-IQ	**DIN rail**
GND (1), CANL (2), CANH (3), +24V (4)	IEX2 bus to field modules
RJ10 (left side)	to previous DIN rail module
RJ10 (right side)	to next DIN rail module
AIR-12-IQ	**DIN rail**
IWx , C	Pt 1000 temperature probe
RJ10 (left side)	to previous DIN rail module
RJ10 (right side)	to next DIN rail module
GW-ENO-IQ	**DIN rail**
RJ10 (left side)	to previous DIN rail module
RJ10 (right side)	to next DIN rail module
GW-WN-W	**on wall**
	
+, -	to **PS-IQ** +, -
Rx/T+, Tx/T-	to **CAD-232-A2-IQ** A, B
DIP settings	1=ON, 2-8=OFF

Power meters

Sources and consumers measurements

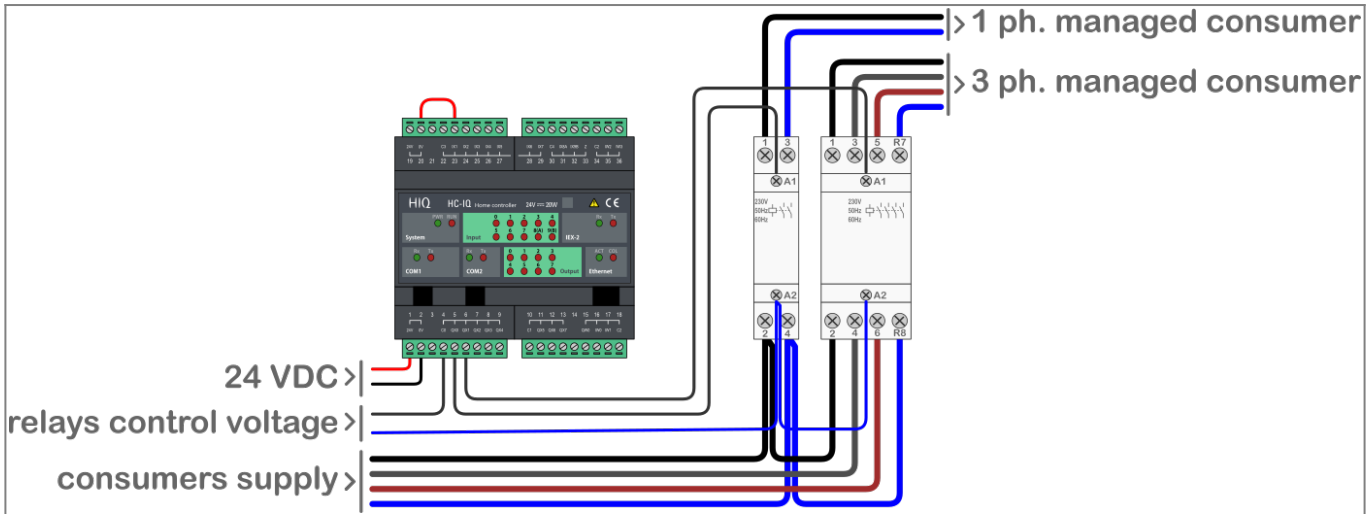


PM3-I-D	**DIN rail**
L1i, L2i, L3i, N	to power source L1, L2, L3, N (grid, local power plant, generator, ...)
L1o, L2o, L3o, N	to consumers L1, L2, L3, N
15, 16	to **CAD-232-A2-IQ** A,B or to **BR-WN-W** Rx/T+, Tx/T- when there is no possibility to connect directly
PM1-E-D	**DIN rail**
L↑ (1)	to power source L (grid, local power plant, generator, ...)
L↓ (2)	to consumer L
9, 10	to **CAD-232-A2-IQ** B,A or to **BR-WN-W** Tx/T-, Rx/T+ when there is no possibility to connect directly
BR-WN-W	**on wall**



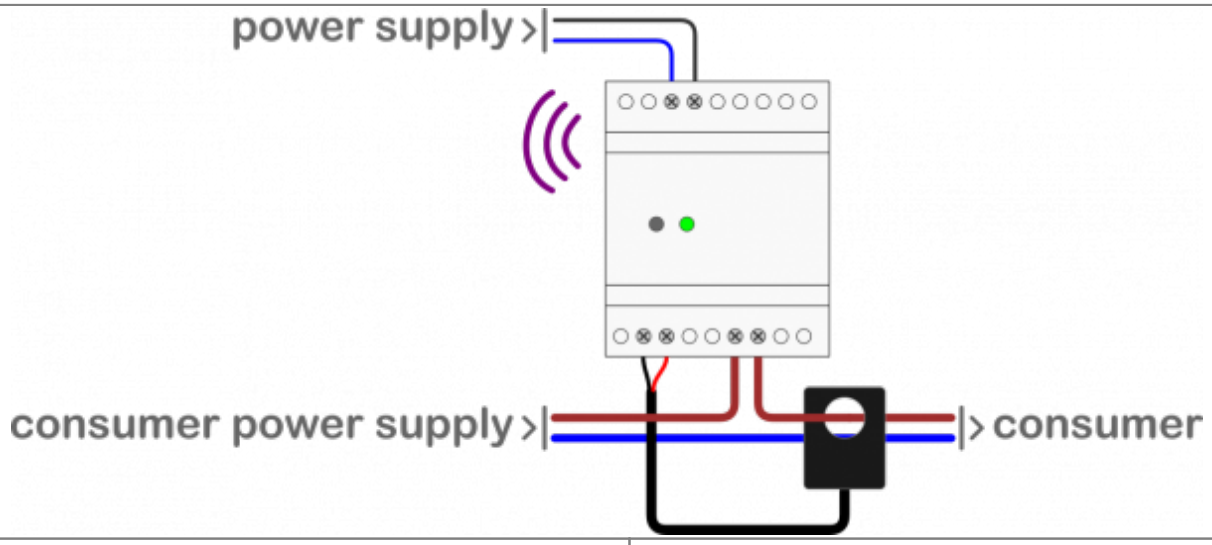
+, -	to **Plug-in power supply** +, - (included in the delivery)
Rx/T+, Tx/T-	to **PM1-E-D** 10, 9 ot to **PM3-I-D** 15,16
DIP settings	ALL OFF

Load managers

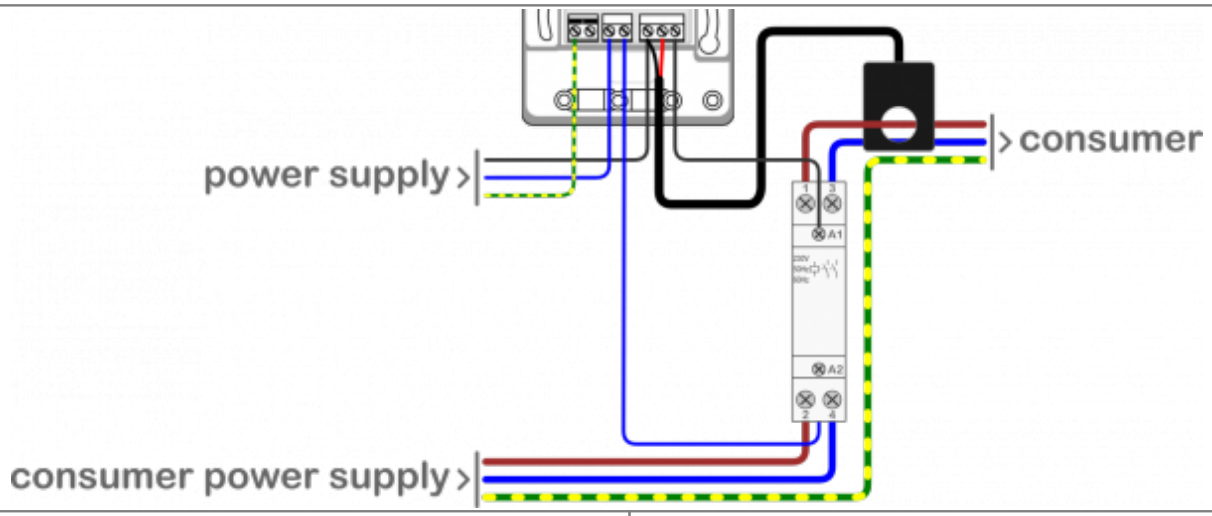


Power-relays	**DIN rail**

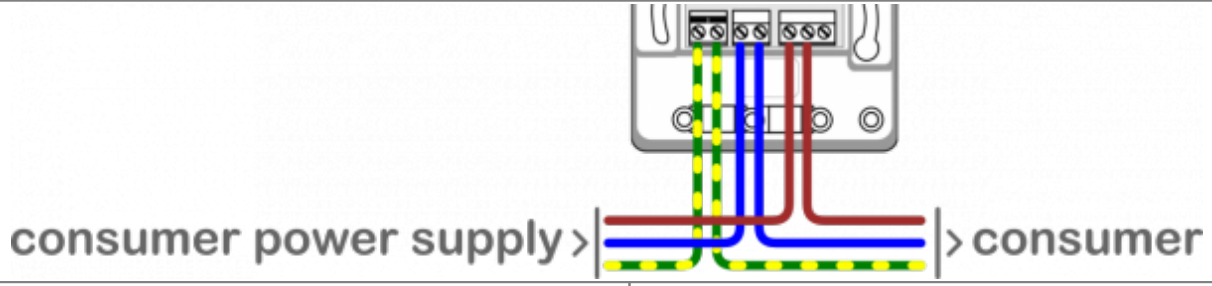
Relays control voltage A1, A2	**HC-IQ-HEMS** QX0-QX7 for managed load 1 to 8, N
(2, 4 or 2, 4, 6, R8)	Consumer power supply L, N or L1, L2, L3, N
(1, 3 or 1, 3, 5, R7)	Consumer L, N or L1, L2, L3, N



PM1-WN-D	**DIN rail**
16, 17	power supply 230 VAC
2, 3	current transformer black, red
6, 7	consumer power supply - consumer L



PM1-WN-W	**on wall**
1, 1a	PE, internally connected
2, 2a	N, internally connected
3	Device supply / Current transformer black
3a	Current transformer red
3b	Output (Consumer)

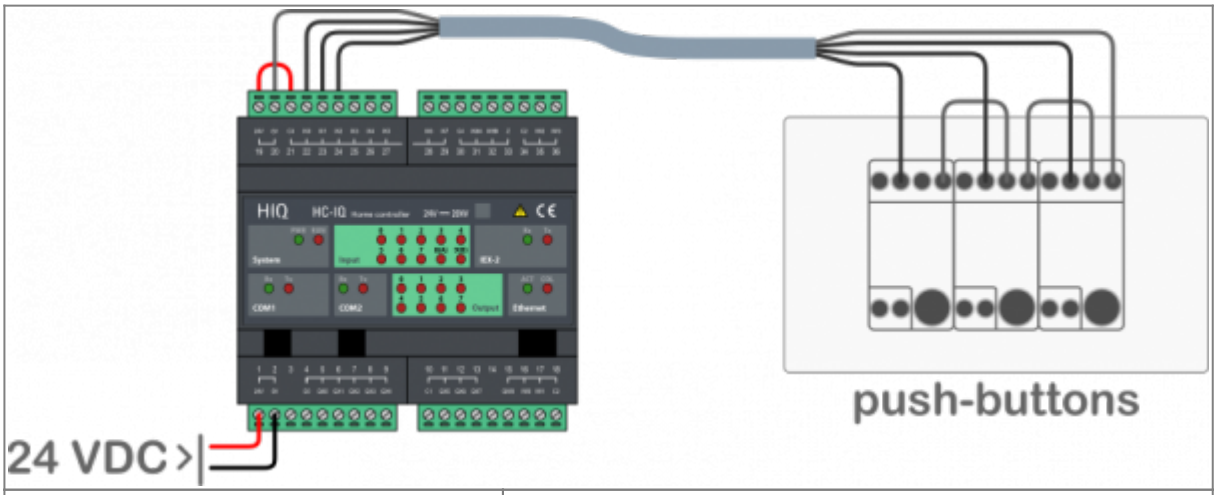


RL1-WN-W	**on wall**

1, 1a	PE, internally connected
2, 2a	N, internally connected
3	Device and consumer supply
3a	Consumer output

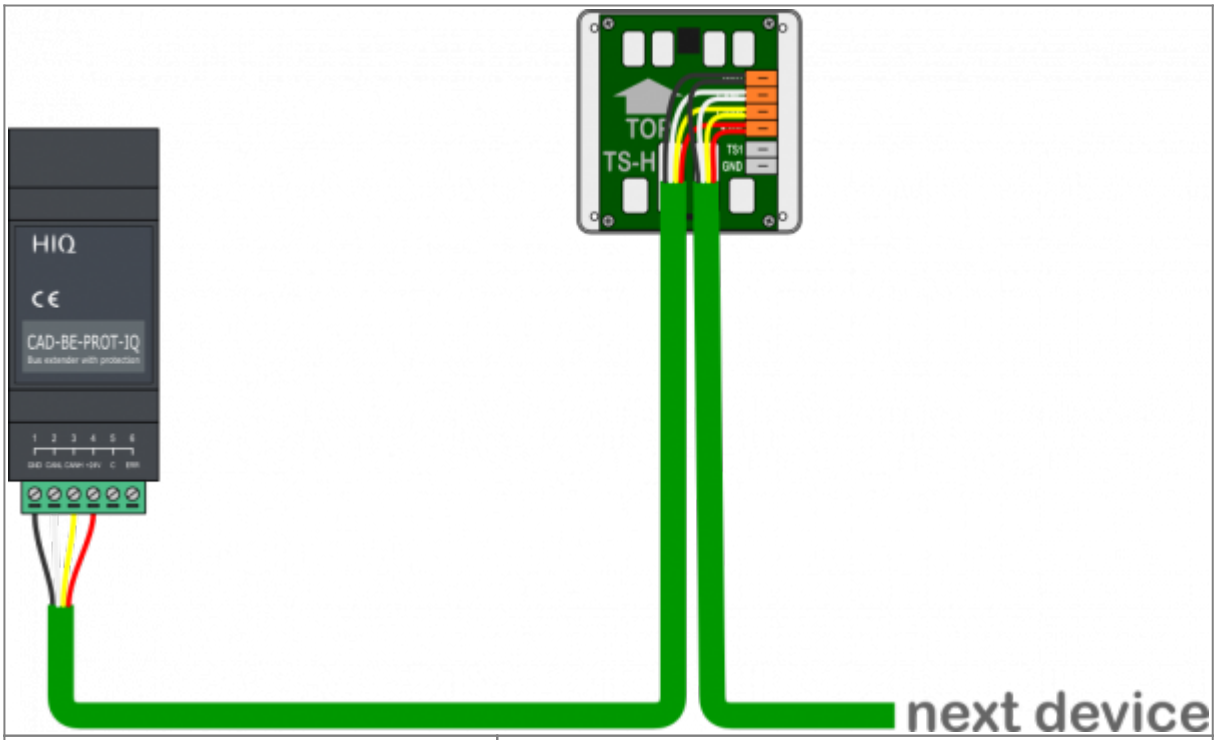
SC1-WN-F	**power outlet**
Plugged in power outlet, consumer plugged in	

Control devices



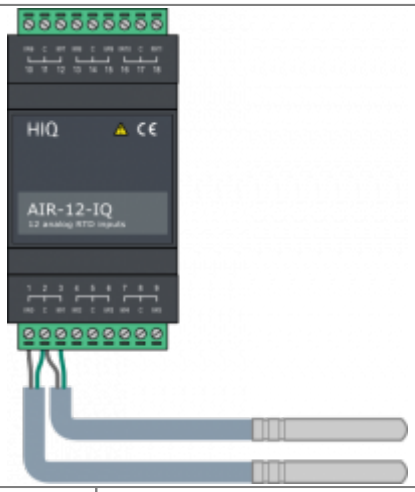
Push-buttons	**in wall**
Common	**HC-IQ-HEMS** 0 V (20)
Signal (NO)	**HC-IQ-HEMS** IX0-IX7 (21)-(29)

Sensors

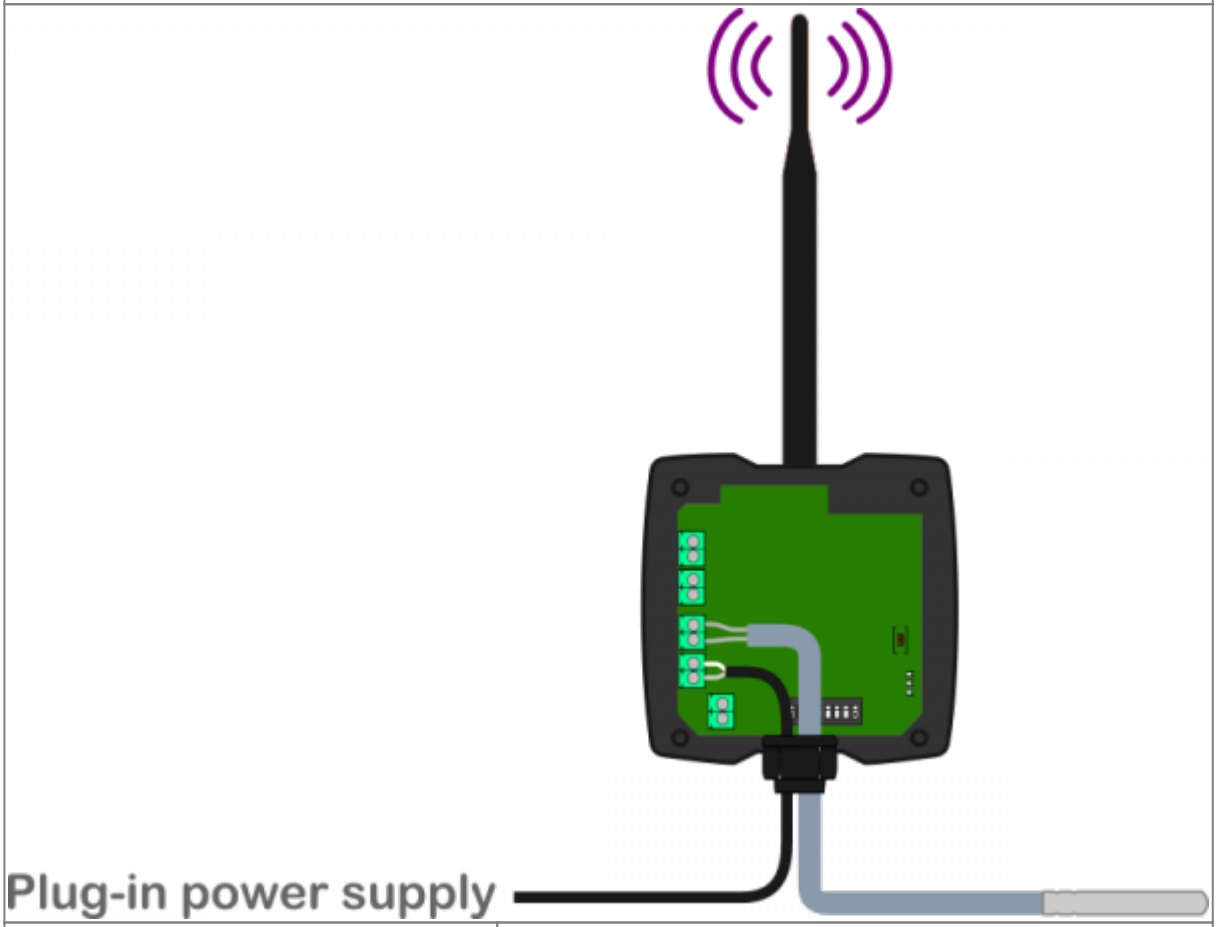


TS-H	**on wall**
GND, CANL, CANH, +24V	**BE-PROT-IQ** GND, CANL, CANH, +24V

TS0, GND	**ES** external temperature probe red, black



AIR-12	**DIN rail**
C, IW0-IW11	**Pt1000** temperature probes
RJ10 (left side)	to previous DIN rail module
RJ10 (right side)	to next DIN rail module



TDI-WN-W	**on wall**
1, 2 (from top)	Digital input 1
3, 4	Digital input 2
5, 6	NTC temperature probe input 1
7, 8	NTC temperature probe input 2
+, -	Plug-in power supply

DIP setting	Address setting: [1=lsb, 8=msb]
	- sensor 1, address 60 = 0011 1100
	- sensor 2, address 61 = 1011 1100
	- sensor 3, address 62 = 0111 1100
	- sensor 4, address 63 = 1111 1100
	- sensor 5, address 64 = 0000 0010
	- sensor 6, address 65 = 1000 0010
	- sensor 7, address 66 = 0100 0010
	- sensor 8, address 67 = 1100 0010