

Data sheet

ON/OFF zone valves AMZ 112, AMZ 113

Description



The ON/OFF zone valves can be applied together with most Danfoss Room Thermostats, particularly type RET 230 (single poled switch) and programmable Room Thermostats type RET 1000/2000. Other compatible room thermostats are available, please see www.danfoss.com/heating for details.

Features:

- Indication of actual valve position;
- LED indication of turning direction;
- Manual valve turning mode enabled by a permanent clutch;
- No damage in case of valve blocking;
- Silent and reliable operation;
- Maintenance free;
- Integrated AUXILIARY switch;
- LED indication of activated AUXILIARY switch.

Main Data:

- Nominal voltage:
 - 230 V AC, 50/60 Hz
 - 24 V AC, 50/60 Hz
- Rotation angle 90°
- Actuator running speed
 - AMZ 112
 - DN 15-20: 30 sec / 90°
 - DN 25-50: 60 sec / 90°
 - AMZ 113
 - DN 15: 30 sec / 90°
 - DN 20-32: 60 sec / 90°
- Control signal: 2-point

The ON/OFF zone valves type AMZ 112 and AMZ 113 are typical used in connection with:

- Domestic and commercial central heating applications
- Domestic hot water applications
- Solar energy plants
- Priority control of hot water supply and heating (diverting function)
- Priority control of boiler and solid fuel installations (diverting function).

Ordering

AMZ 112 2-port valve/actuator

DN	k _{vs} (m ³ /h)	Connection	Code No.	
			230 V	24 V
20	28	Cu-Cu 22	-	082G5427
15	17	R _p ½	082G5406	082G5400
20	28	R _p ¾	082G5407	082G5401
25	39	R _p 1	082G5408	082G5402
32	84	R _p 1¼	082G5409	082G5403
40	156	R _p 1½	082G5410	082G5404
50	243	R _p 2	082G5411	082G5405

AMZ 113 3-port valve/actuator

DN	k _{vs} (m ³ /h)	Connection	Code No.	
			230 V	24 V
15	4,3	R _p ½	082G5418	082G5412
20	8,3	R _p ¾	082G5419	082G5413
25	13	R _p 1	082G5420	082G5414
32	21	R _p 1¼	082G5421	082G5415

Technical data
Actuator

Power supply	V	24 AC or 230 AC
Power consumption	VA	AMZ 112: 2,5 AMZ 113: 3,5
Frequency	Hz	50/60
Running speed ¹⁾	sec/90°	30, 60
Control input		2-point
Operating torque	Nm	5, 10, 15
Rotation angle		90 °
Auxiliary switch		adjustable 0-90°
Auxiliary switch max. load	A	6 (24V AC, 230V AC)
Max. medium temperature	°C	110
Ambient temperature		0 ... 50
Storage and transport temperature		-10 ... 80
Protection Class		II according to EN 60730-1
Grade of enclosure		IP42 according to EN 60529
Weight	AMZ 112 AMZ 113	g 728 906
Color / material		dark grey/PC
marking in accordance with standards		Low Voltage Directive 2006/95/EC EMC-Directive 2004/108/EC RoHS II: 2011/65/EU Applied standards: EN 60730-1, EN 60730-2-14

¹⁾ 5 Nm is 30 sec/90°; 10, 15 Nm is 60 sec/90°

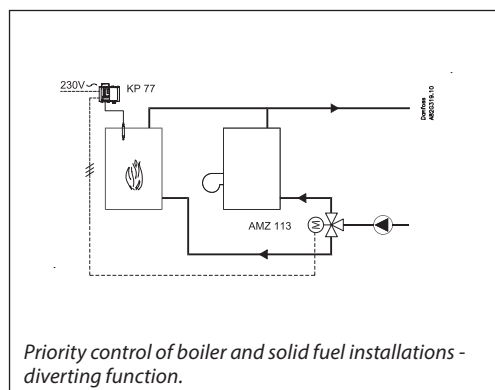
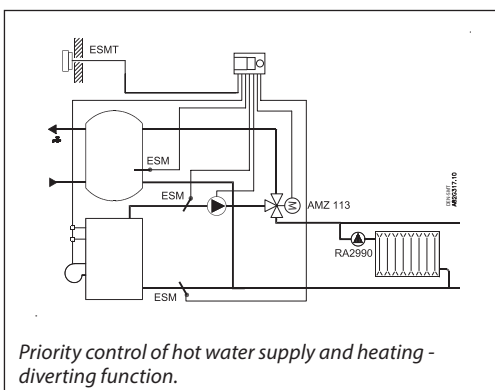
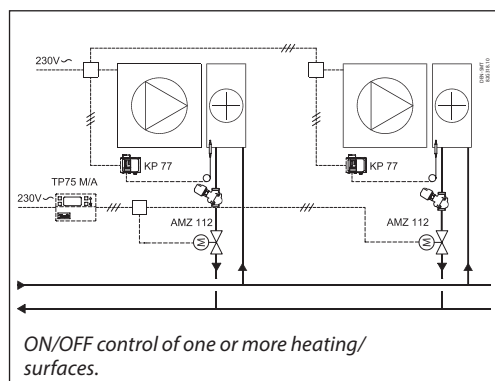
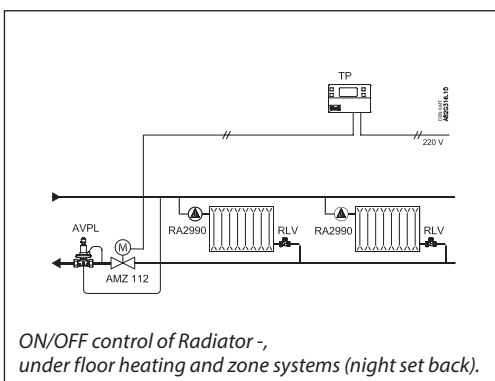
Valve AMZ 112

DN		15	20	25	32	40	50
Nominal pressure	PN	40				25	
Flow (k _{vS})	m ³ /h	17	28	39	84	156	243
Medium temperature	°C	2 ... 130 (Actuator max. 110)					
Medium		Drinking water, water, glycol ≤50%, air, nonaggressive fluids					
Max. operating Δp	bar	6					
Valve neck		ISO 5211					
Connection		Internal thread Rp ISO 7/1					
Certifications and standards		CE-PED – CSA - GOST					
Materials							
Body		CW 617 N UNI EN 12165					
Ball, Stem		CW 614 N UNI EN 12164					
Antifriction ring		PTFE					

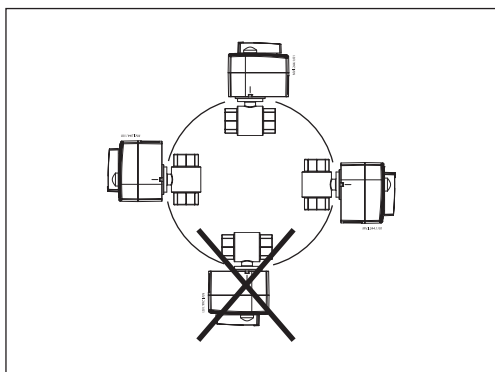
Valve AMZ 113

DN		15	20	25	32
Nominal pressure	PN	40			
Flow (k _{vS})	m ³ /h	4,3	8,3	13	21
Medium temperature	°C	2 ... 130 (Actuator max. 110)			
Medium		Drinking water, water, glycol ≤50%, air, nonaggressive fluids			
Max. operating Δp	bar	6			
Valve neck		ISO 5211			
Connection		Internal thread Rp ISO 7/1			
Certifications and standards		CE-PED – CSA - GOST			
Materials					
Body		CW 617 N UNI EN 12165			
Ball, Stem		CW 614 N UNI EN 12164			
Antifriction ring		PTFE			

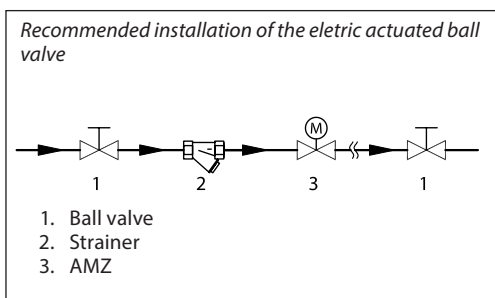
Application principles



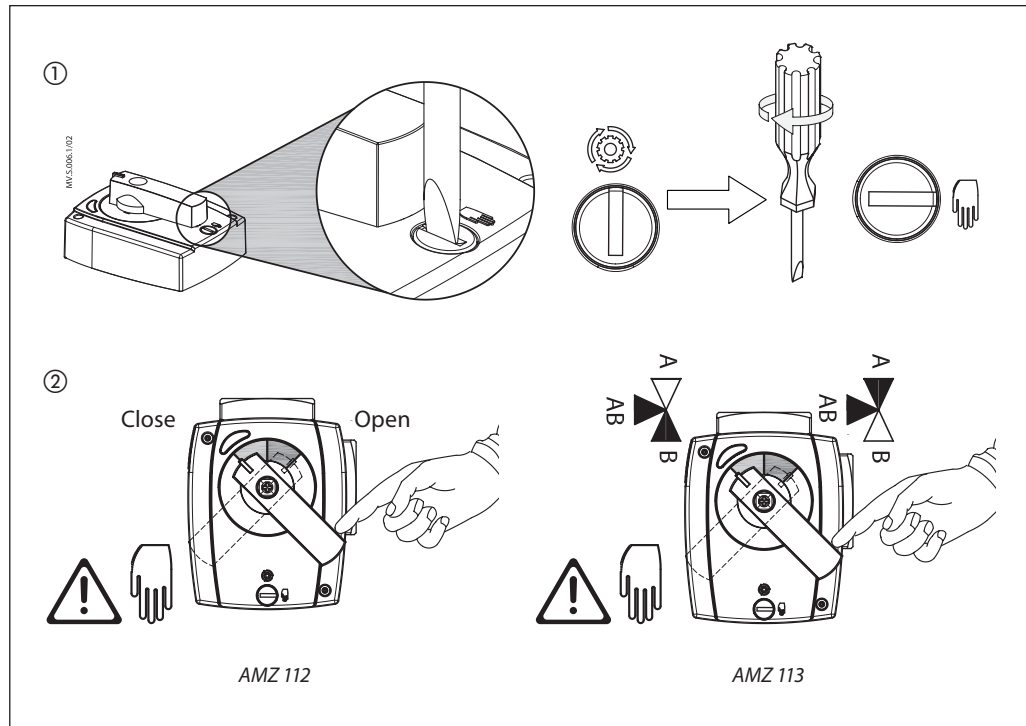
Installation positions



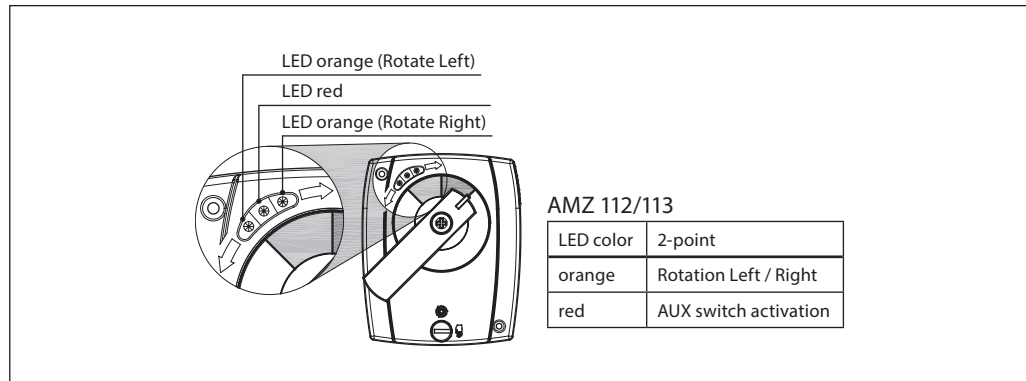
Hydraulic installation



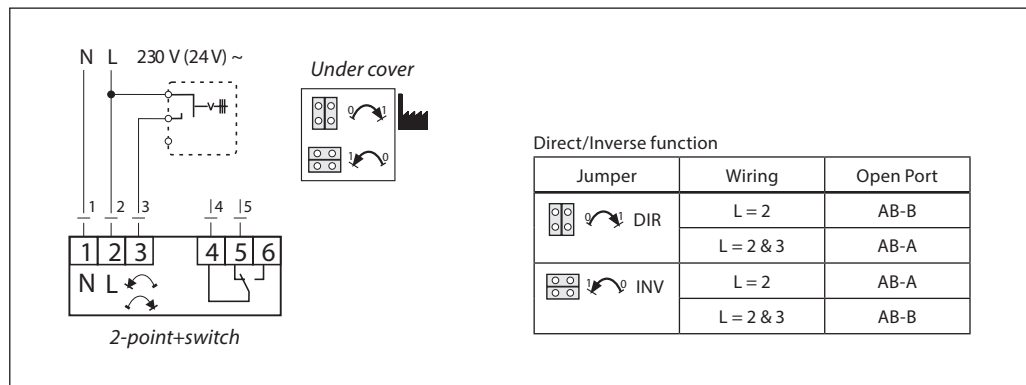
Manual override



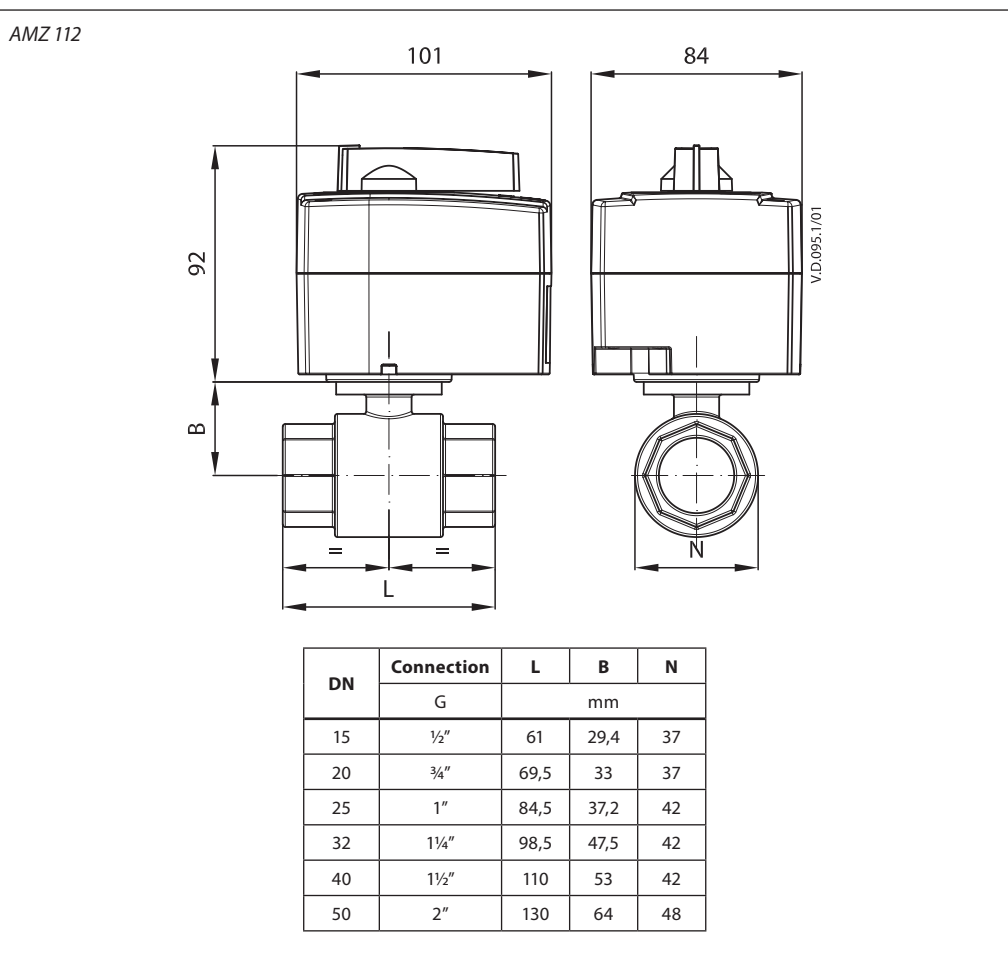
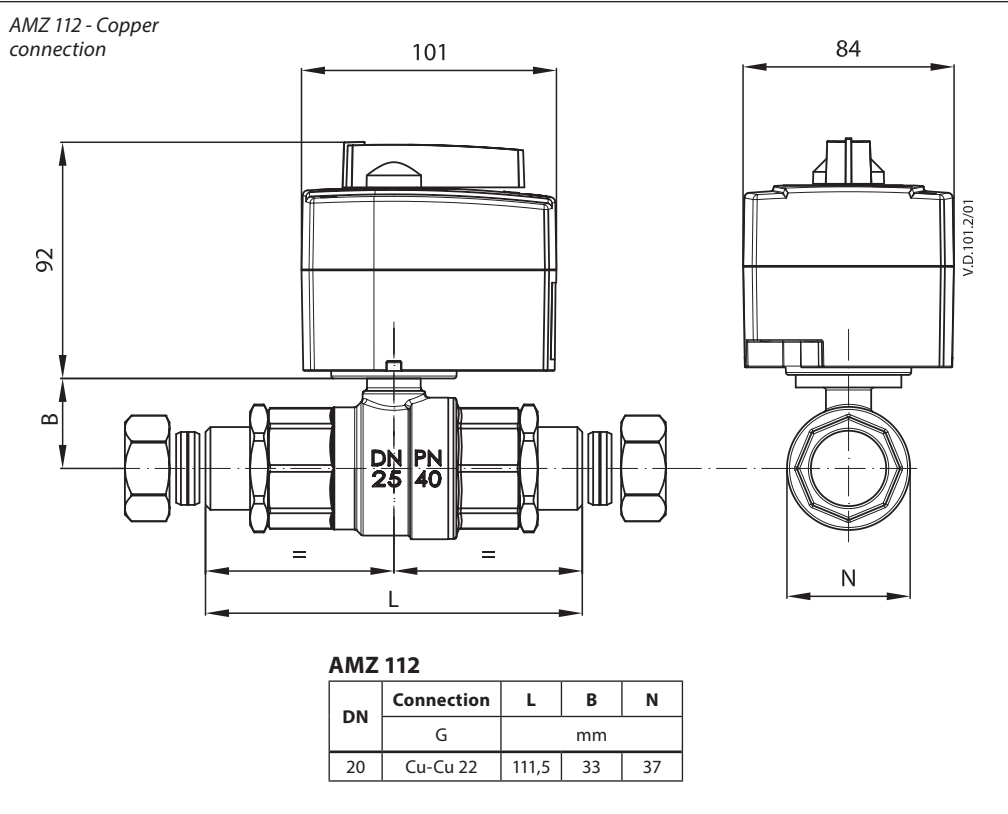
LED signalling



Wiring



Dimensions



Dimensions (continuous)

