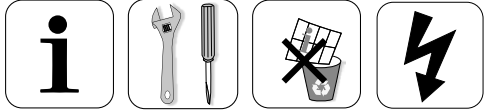


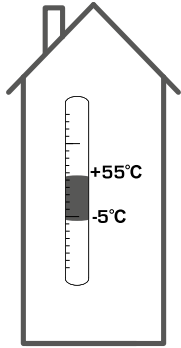
ESBE SERIES ARA600 Prop



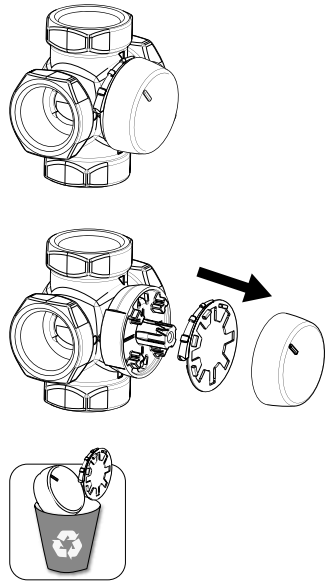
Series ARA639
Series ARA659

CE

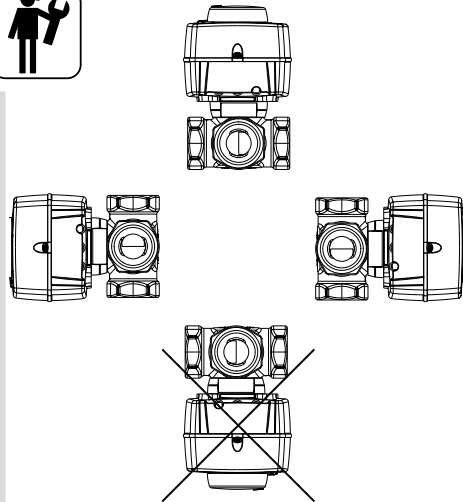
LVD 2006/95/EC
EMC 89/336/EEC
RoHS 2002/95/EEC



1



2

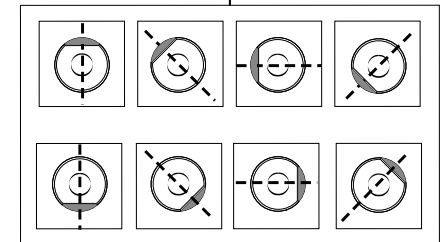
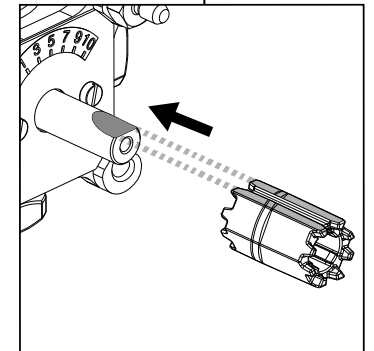
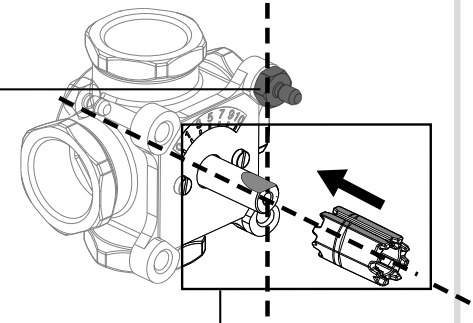


3



Series MG, G, F, H, HG, BIV, T, TM

	DN15-25	
	DN20-40	
	DN50	
	DN20-25	
	DN32-50	
	H: DN25	
	H: DN32-50	
	HG: DN25	
	DN20-22	
	DN25	
	T: DN20-32	
	TM: DN20	



i



+



VRG, VRB, VRH

3MG, 4MG



3G, 4G

3F, 4F ≤ DN50

3HG, 4HG, 3H, 4H



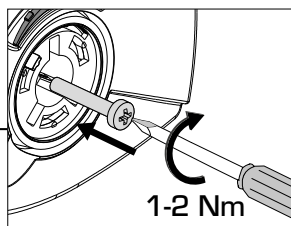
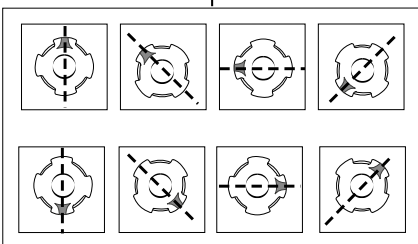
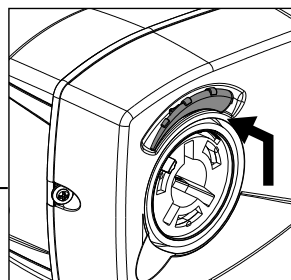
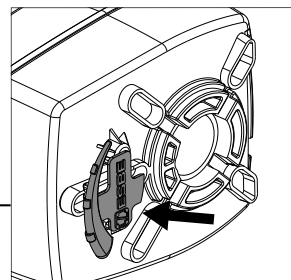
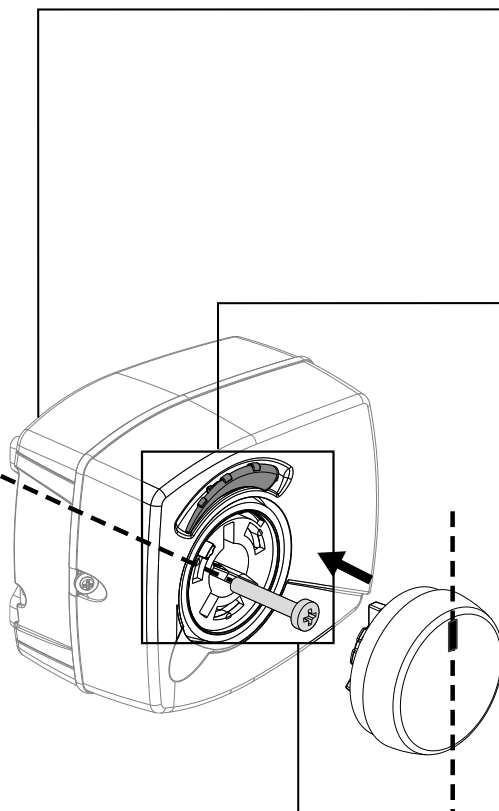
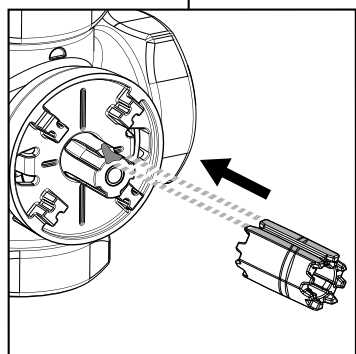
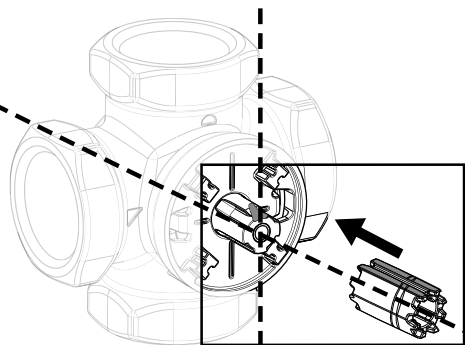
BIV

T, TM

VRC160

Series VRGxxx, VRBxxx, VRHxxx

Series VRCxxx



Mtr/nr: 9814 02 76 • Rit/nr: 8082 Vers. K • Rev. 1909

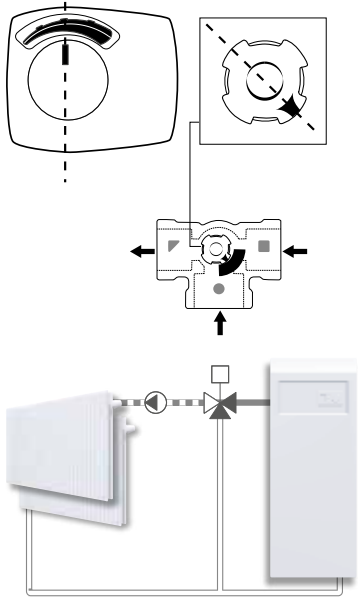


SERIES ARA600 Prop

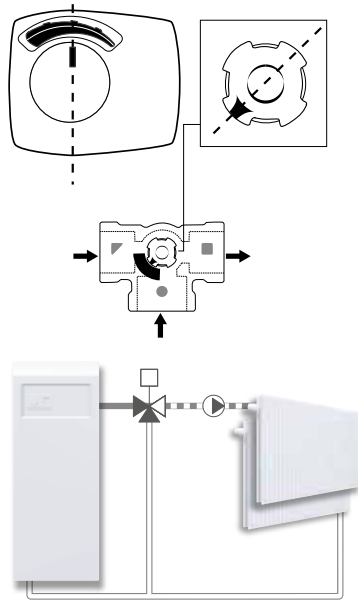


SERIES VRG130

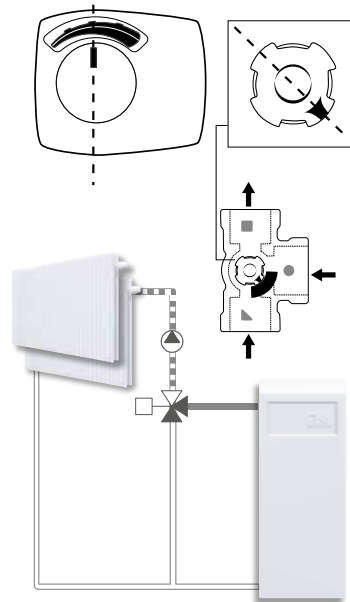
a



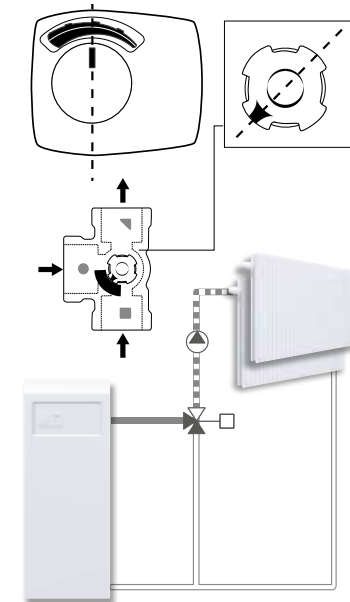
b



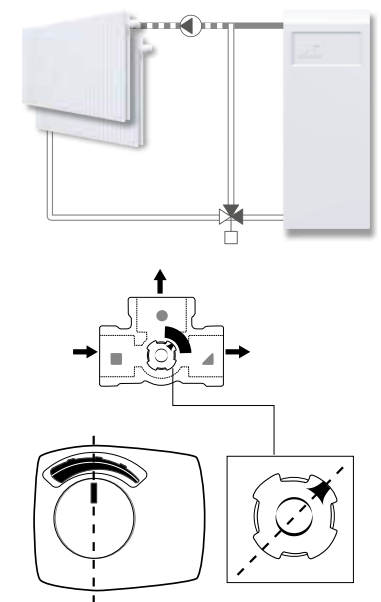
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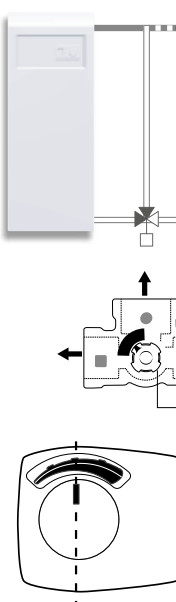
d



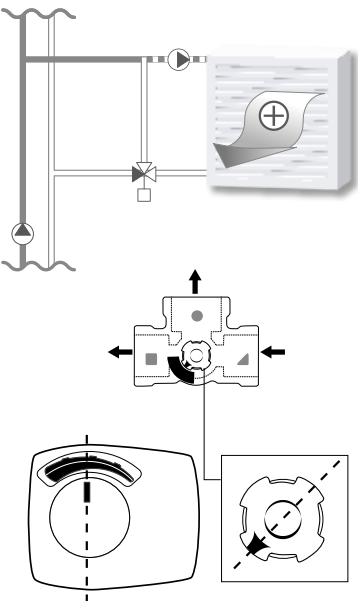
e



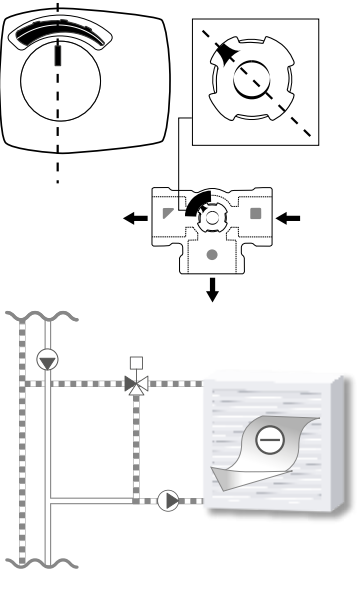
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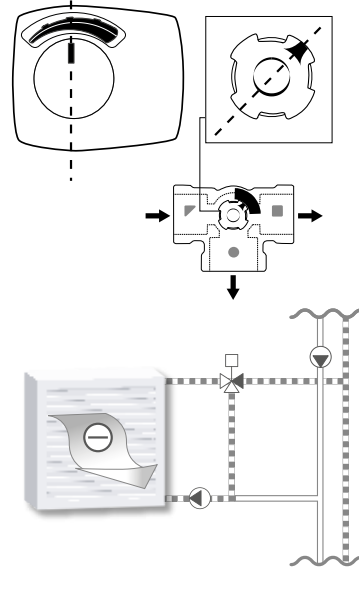
l



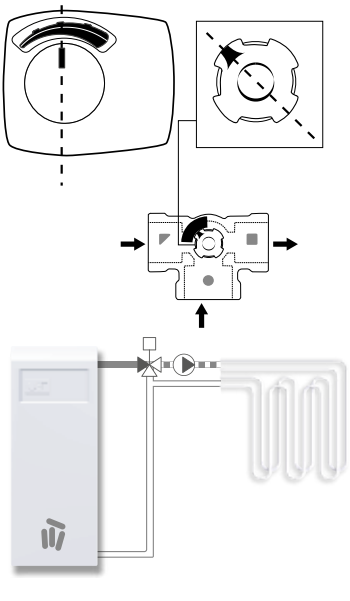
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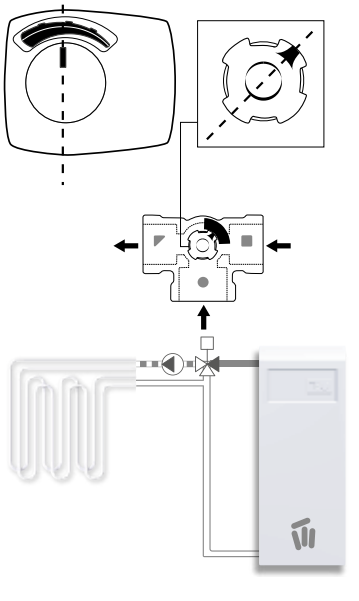
n



o

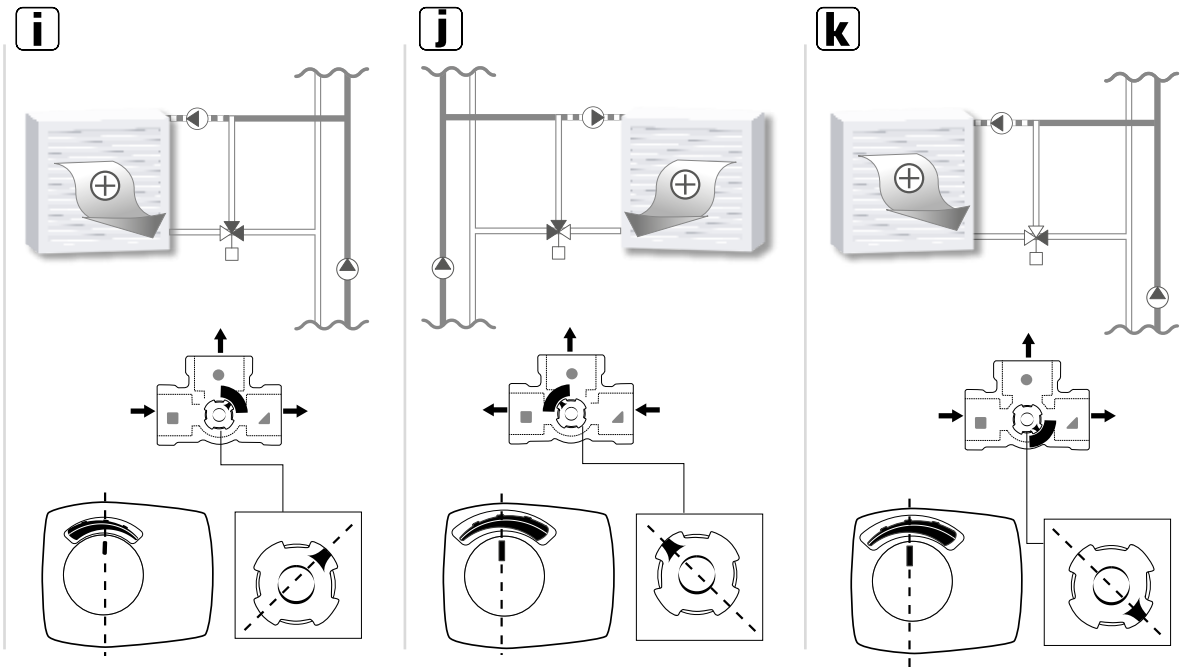
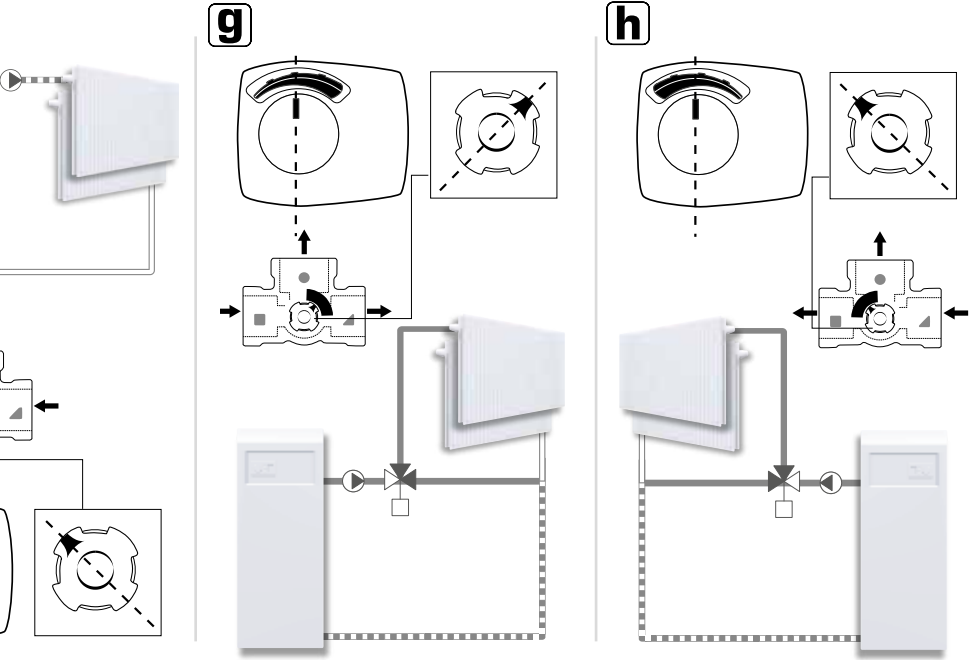


p



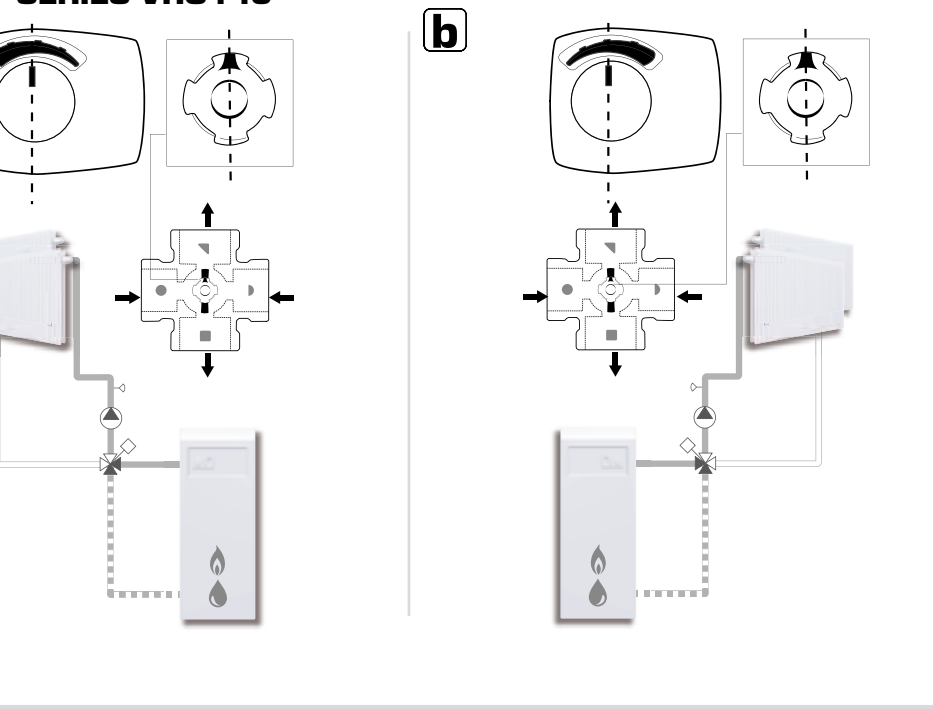
a



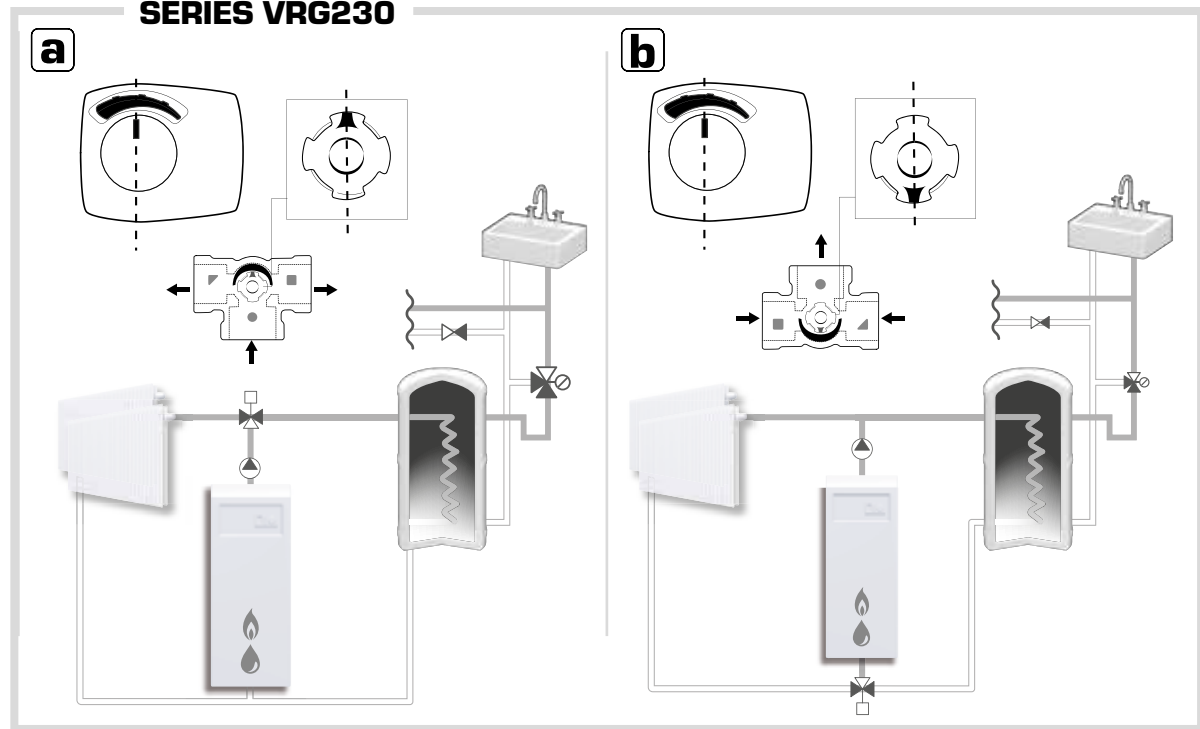


SERIES VRG130

SERIES VRG140

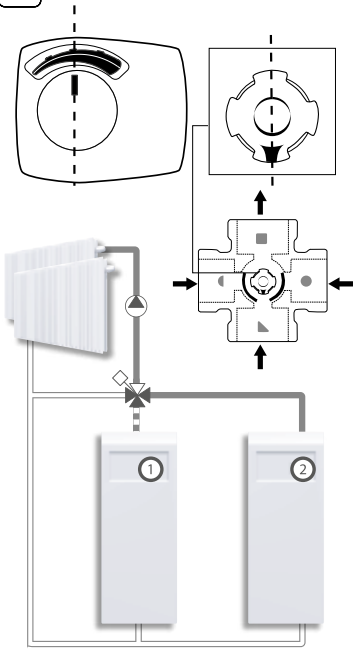


SERIES VRG230

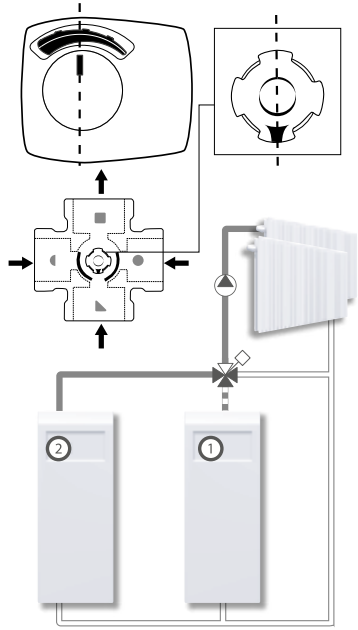


SERIES VRB140

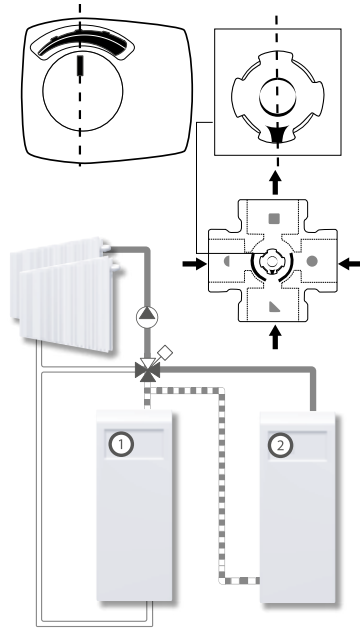
a



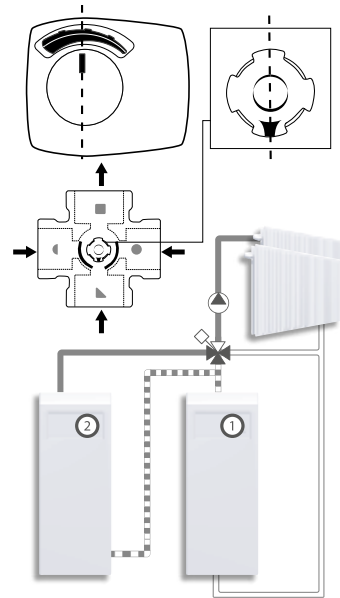
b



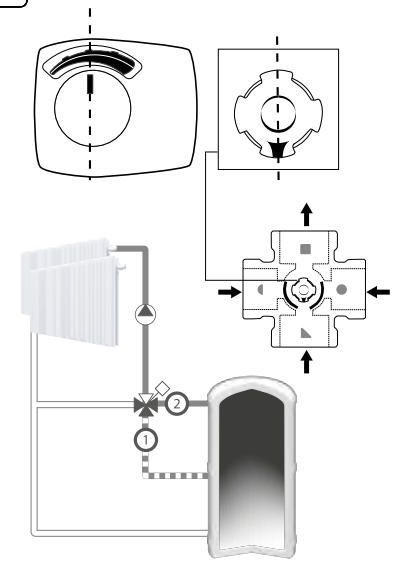
c



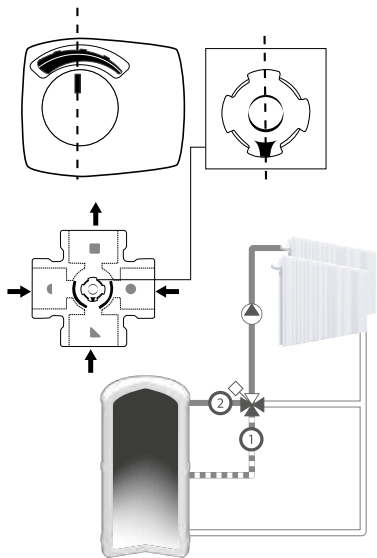
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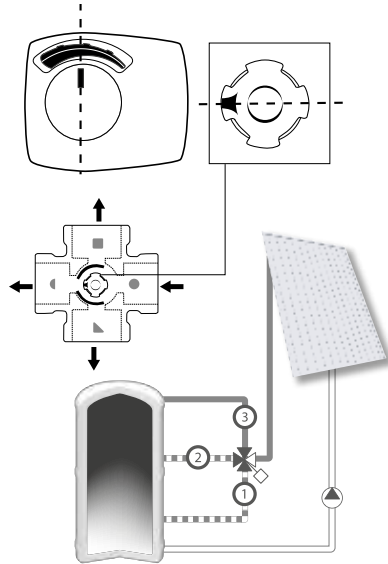
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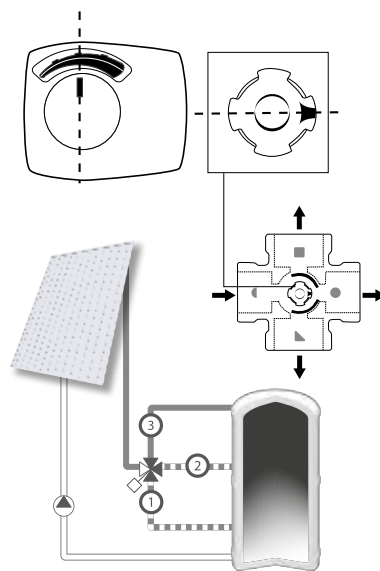
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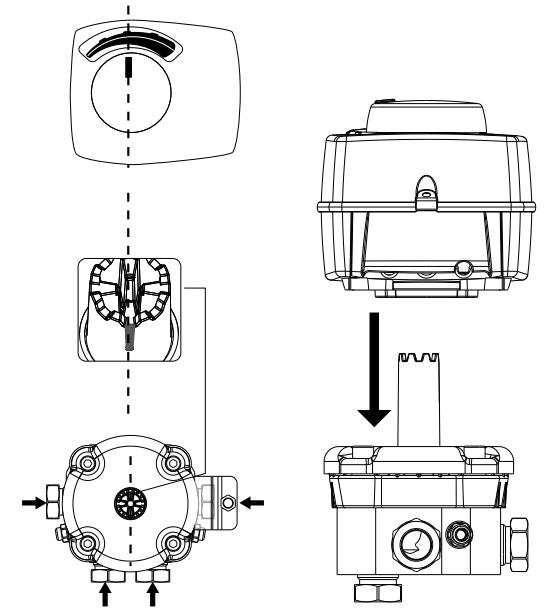
g



h

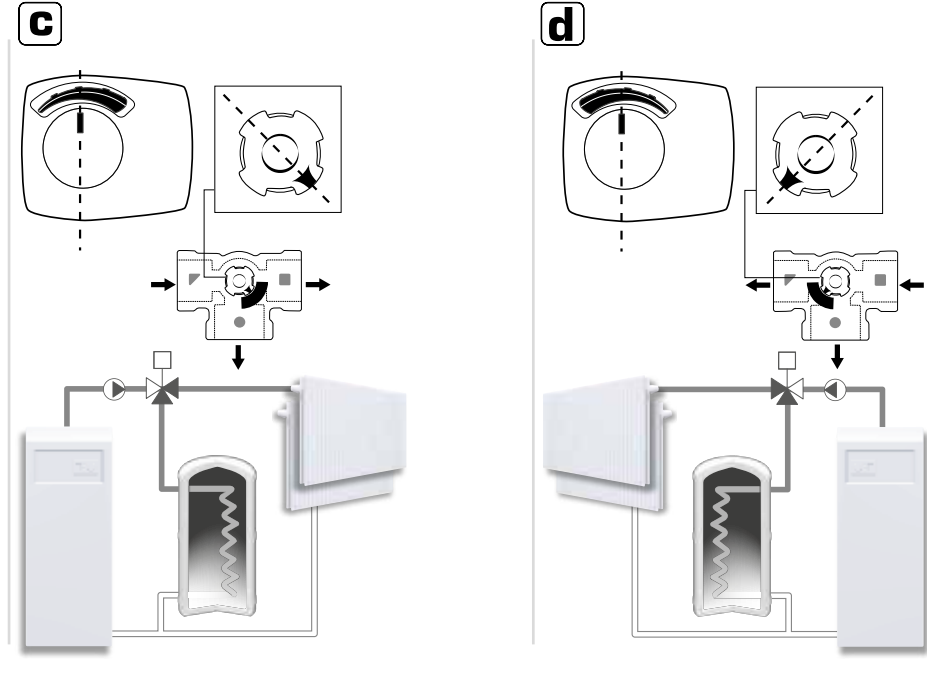
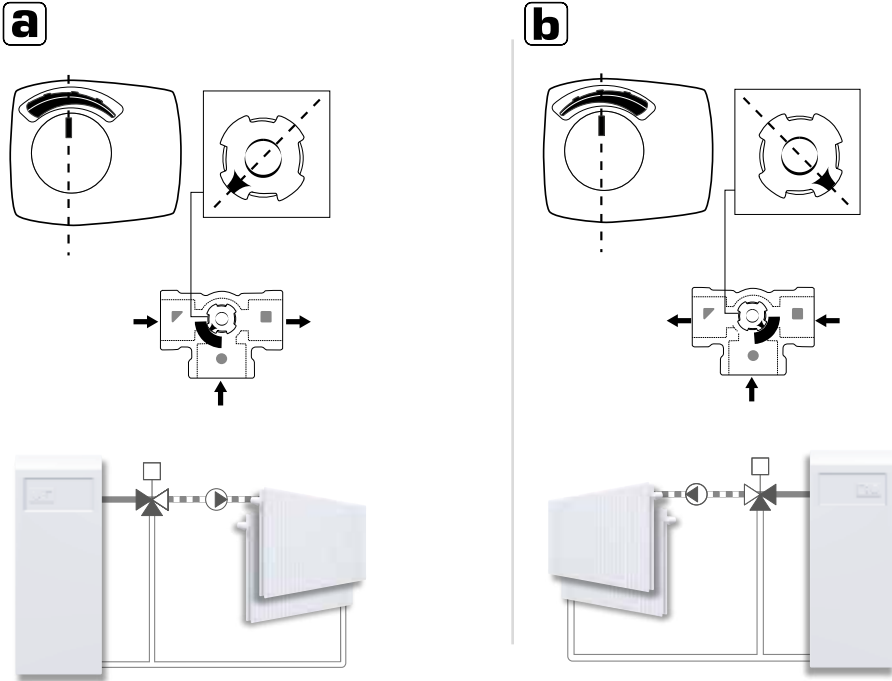


SERIES VRC160



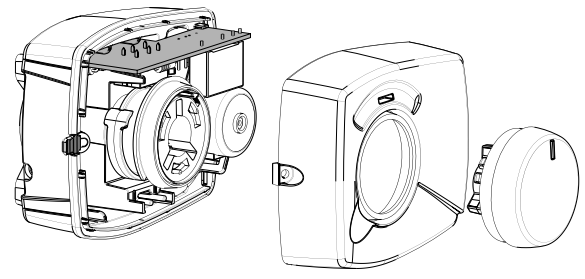
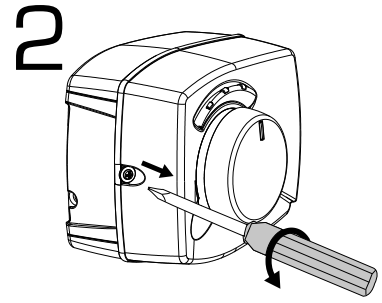
Piping Schematics are General Representations

SERIES VRG330



We would like to pinpoint to the existence of a German patent DE 19821256C5 affecting the usage of bivalent 4-way valves in liquid circulation heating systems. In this patent the usage of a 4-way bivalent valve in a type of heating system is protected, in which 2 different heating circuits are operated in parallel, where the return of the first circuit is utilized as heat source for the second circuit. The patent also describes a method for the operation of such a heating system. The patent also describes a method for the operation of such a heating system, where the floor heating in a regulated manner is heated through its heat source and the return from the primary heat circuit is utilized as alternative secondary heat source for the floor heating. Such a utilization of our bivalent 4-way valve without approval of the patent holder is forbidden. All other applications our product group VRG are without restrictions possible.

4





Series ARA639

3/U

3/I

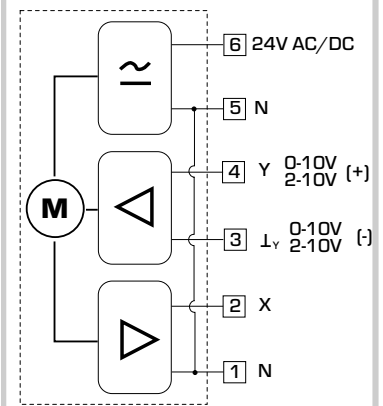
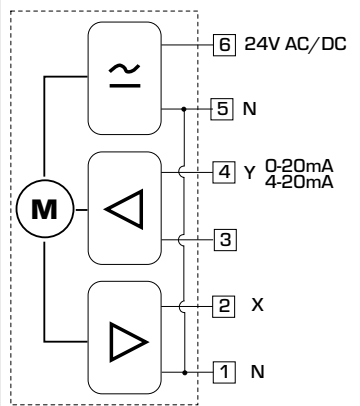
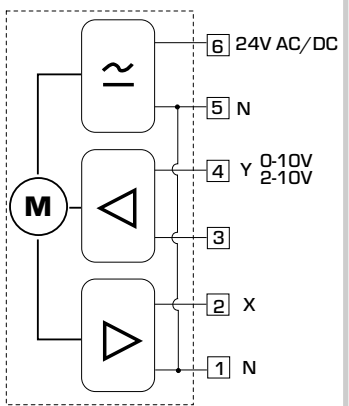
4/U

ON

1	120s	60s	30s	15s
2	120s	60s	30s	15s
3	0-10V	0-20mA	2-10V	4-20mA
4	0-10V	0-20mA	2-10V	4-20mA

Y

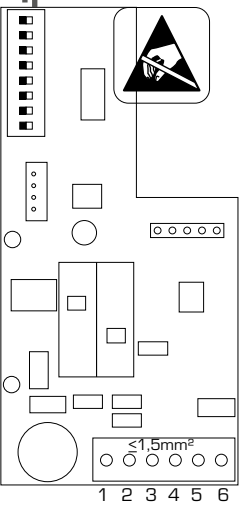
5	ON	SEQ
6	CW	CCW
7	Waveform 1	Waveform 2
8	Waveform 3	Waveform 4



ON

1	120s	60s	30s
2	120s	60s	30s
3	OFF		
4	ON		
5	ON		
6	CW	CCW	
7	OFF		
8	OFF		

SEQ Cntrl

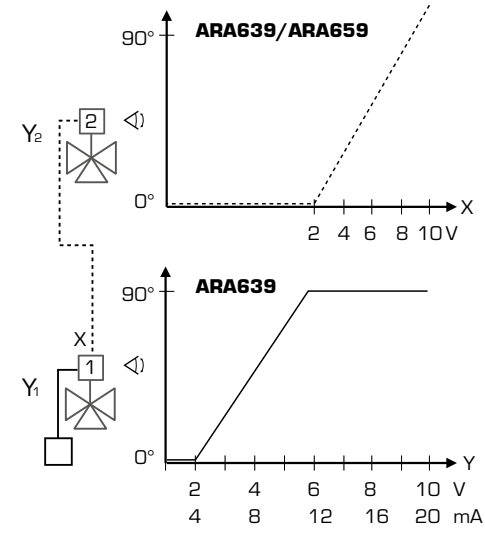
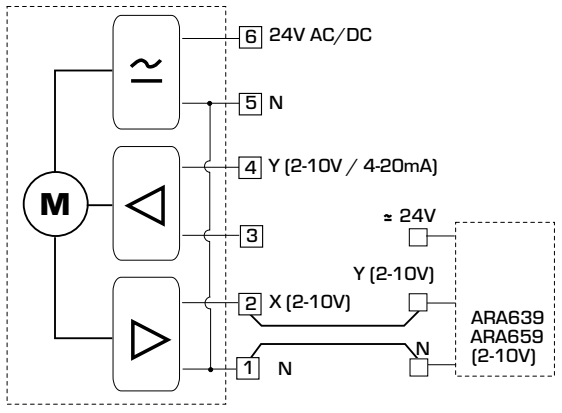


ON

1	120s	60s	30s	15s
2	120s	60s	30s	15s
3	2-10V	4-20mA		
4	2-10V	4-20mA		

Y

5	ON	SEQ
6	CW	CCW
7	Waveform 1	Waveform 2
8	Waveform 3	Waveform 4

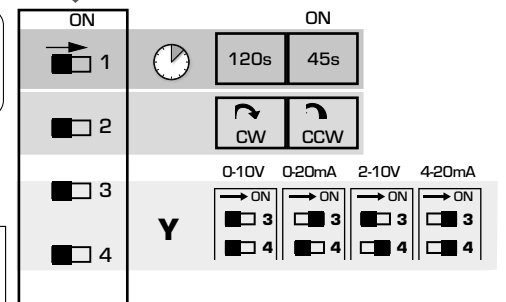
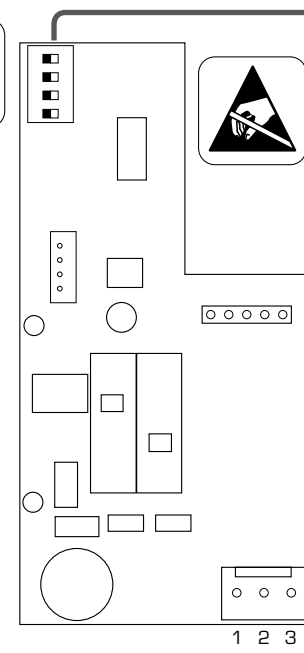
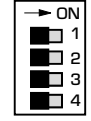
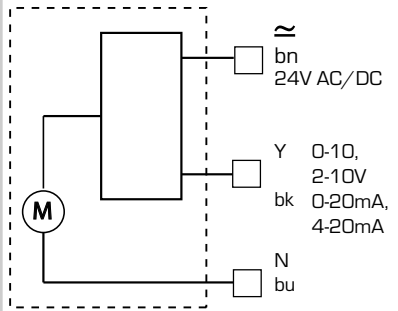
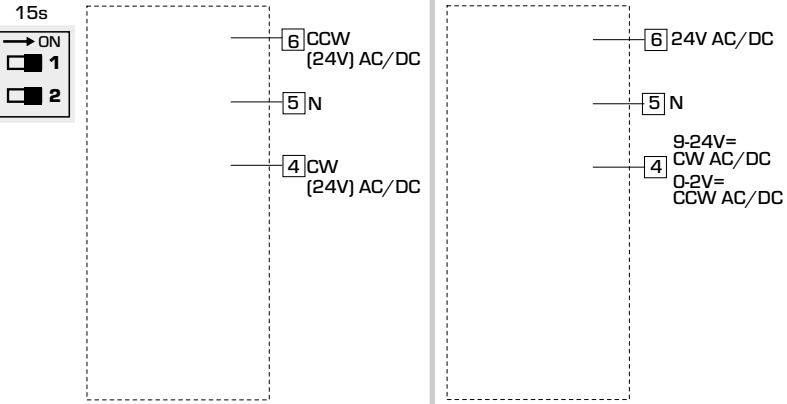


Series ARA659



3-point

2-point



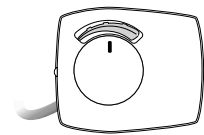
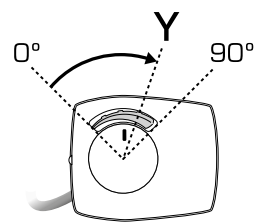
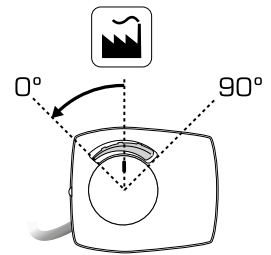
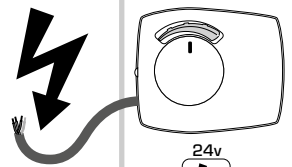
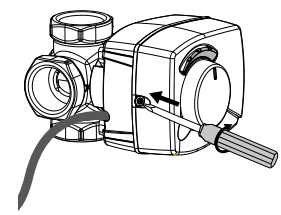
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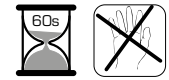
1

2

3



24v



2

1

