

Master Price List

valid from 01. March 2023



Efficient. Innovative. Sustainable.

ELESTA PARTNER PROGRAM

With the award of becoming an Elesta System House, System Partner or Product Partner you make customers aware of your unique skills and abilities and show that your expertise is matching exactly to their needs.

The more you intensify your co-operation with Elesta by qualifying in the training programs, the more extensive and premium are the benefits to you. A good opportunity to improve your profitability and expand your business.

Are you?

- An enterprise with controls, heating/ventilation/air conditioning, electro-technology or communication background
- Interested in the active marketing of the Controlesta products from the planning phase to the assignment to public clients, final customers and general contractors
- Offering reliable achievements over all phases of a project

get in touch with us:

info@elesta.de

Join the Elesta Partner Program



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Type	Page	Price EUR	Delivery time	Type	Page	Price EUR	Delivery time
A				A			
A2.K	40	181,--	1 w.	ASKC21.1	50	855,--	on st.
A2.L	46	365,--	1 w.	ASKC21.2	50	855,--	on st.
A2.M	40	345,--	1 w.	ASKF12.1Y	50	540,--	on st.
A2.N	44	150,--	1 w.	ASKF12.2Y	50	540,--	on st.
				ASKF22.1Y	50	680,--	on st.
A4.K	40	284,--	1 w.				
A4.L	46	465,--	1 w.	ASKF22.2Y	50	680,--	on st.
A4.M	40	446,--	1 w.	ASLC01.12	46	3 000,--	2 w.
A4.N	44	494,--	1 w.	ASLC04.12	46	3 250,--	2 w.
ADG111AO00				ASLG04.12Y	46	3 850,--	2 w.
DN 3/8" kvs 1,25	34	35,--	on st.	ASMA01.10	50	1 800,--	on st.
DN 1/2" kvs 1,35	34	36,--	on st.				
DN 3/4" kvs 2,5	34	48,--	on st.	ASMA01.2	50	1 800,--	on st.
DN 1" kvs 4,2	34	76,--	on st.	ASMA01.9	50	1 800,--	on st.
DN 1 1/4" kvs 5,8	34	117,--	on st.	ASMA04.10	50	2 150,--	2 w.
				ASMA04.2	50	2 150,--	2 w.
ADG211AO00				ASMA04.9	50	2 150,--	2 w.
DN 1/2" kvs 0,63	34	149,--	on st.				
DN 1/2" kvs 2,5	34	146,--	on st.	ASMA11.2	42	1 850,--	2 w.
DN 3/4" kvs 3,5	34	176,--	on st.	ASMA11.19	46	1 850,--	2 w.
DN 1" kvs 5,1	34	227,--	on st.	ASMA14.2	42	2 260,--	2 w.
				ASMA14.19	46	2 260,--	2 w.
A20405	34	27,--	on st.	ASMF04.2Y	50	2 500,--	2 w.
A40405	34	27,--	on st.				
APR40405	34	71,--	on st.	ASMF04.9Y	50	2 500,--	2 w.
AST20405	34	28,--	on st.	ASMF04.10Y	50	2 500,--	2 w.
AST40405	34	28,--	on st.	ASMF14.19Y	46	2 650,--	2 w.
				ASMF14.2Y	42	2 650,--	2 w.
AHS015A22	38	785,--	on st.	ASNA01.1	44	1 690,--	on st.
AHS015A24Y	38	915,--	on st.				
AHS020A62	38	1 130,--	on st.	ASNA01.2	44	1 690,--	on st.
AHS020A64	38	1 230,--	on st.	ASNA014.1	45	1 980,--	2 w.
				ASNA014.2	45	1 980,--	2 w.
AHS020F64Y	38	1 350,--	on st.	ASNA02.1	44	1 690,--	2 w.
AHS041A42	38	1 810,--	on st.	ASNA02.2	44	1 690,--	2 w.
AHS041A44	38	2 180,--	on st.				
AHS041F44Y	38	2 555,--	on st.	ASNA024.1	45	1 980,--	2 w.
				ASNA024.2	45	1 980,--	2 w.
AHS106A22	38	380,--	on st.	ASNA201.1	44	1 980,--	2 w.
AHS106A24Y	38	420,--	on st.	ASNA201.2	44	1 980,--	2 w.
AHS110A22	38	457,--	on st.	ASNA202.1	44	1 980,--	2 w.
AHS110A24Y	38	495,--	on st.				
ASF122BT				ASNA202.2	44	1 980,--	2 w.
DN 65 kvs 63	44	1 134,--	2 w.	ASNA214.1	45	2 200,--	2 w.
DN 80 kvs 100	44	1 457,--	2 w.	ASNA214.2	45	2 200,--	2 w.
DN 100 kvs 160	44	1 774,--	2 w.	ASNA224.1	45	2 200,--	2 w.
				ASNA224.2	45	2 200,--	2 w.
DN 125 kvs 250	46	2 637,--	2 w.				
DN 150 kvs 400	46	3 485,--	2 w.	ASNf014.1Y	45	2 390,--	on st.
DN 200 kvs 630	46	6 137,--	2 w.	ASNf014.2Y	45	2 390,--	on st.
DN 250 kvs 1000	46	10 945,--	2 w.	ASNf024.1Y	45	2 390,--	2 w.
				ASNf024.2Y	45	2 390,--	2 w.
ASF134AT				ASNf214.1Y	45	2 600,--	2 w.
DN 15 kvs 0,4	44	676,--	2 w.	ASNf214.2Y	45	2 600,--	2 w.
DN 15 kvs 0,63	44	676,--	2 w.	ASNf224.1Y	45	2 600,--	2 w.
DN 15 kvs 1,0	44	676,--	2 w.	ASNf224.2Y	45	2 600,--	2 w.
DN 15 kvs 1,6	44	676,--	2 w.	AV8-25	31	52,--	1 w.
DN 15 kvs 2,5	44	676,--	2 w.	AZM160A	56	108,--	on st.
DN 15 kvs 4,0	44	676,--	2 w.				
DN 25 kvs 6,3	44	687,--	2 w.	AZM161A	56	108,--	on st.
DN 25 kvs 10	44	687,--	2 w.	AZM162A	56	108,--	on st.
DN 32 kvs 16	44	829,--	2 w.	AZM163A	56	108,--	on st.
DN 40 kvs 25	44	867,--	2 w.	AZM175A	56	99,--	on st.
DN 50 kvs 40	44	971,--	2 w.	AZM176A	56	103,--	on st.
ASF222BT				AZM181A	57	318,--	on st.
DN 125 kvs 250	46	3 460,--	2 w.	AZM182A	57	557,--	on st.
DN 150 kvs 320	46	4 975,--	2 w.	AZM184A	57	710,--	2 w.
DN 200 kvs 630	46	8 965,--	2 w.	AZM186A	57	1 105,--	2 w.
DN 250 kvs 1000	46	16 020,--	2 w.	AZM187A	57	1 392,--	2 w.
ASK1004	34	52,--	1 w.	AZM188A	57	1 680,--	2 w.
ASKC11.1	50	650,--	on st.	AZM189A	57	2 160,--	2 w.
ASKC11.2	50	650,--	on st.	AZM281A	57	311,--	on st.
				AZM282A	57	610,--	2 w.
				AZM286A	57	1 180,--	2 w.

Type	Page	Price EUR	Delivery time	Type	Page	Price EUR	Delivery time
A				B			
AZM287A	57	1 298,--	2 w.	BKF202AO00			
AZV004A	53	35,--	on st.	DN 20 kvs 5,0	38	294,--	1 w.
AZV007A	52	95,--	on st.	DN 20 kvs 6,3	38	294,--	on st.
AZV010A	53	236,--	on st.	DN 25 kvs 8	38	303,--	1 w.
AZV011B	53	110,--	on st.	DN 25 kvs 10	38	303,--	on st.
AZV013A	52	75,--	on st.	DN 32 kvs 12,5	38	349,--	1 w.
AZV013B	52	85,--	on st.	DN 32 kvs 16	38	349,--	on st.
AZV014A	52	85,--	on st.	DN 40 kvs 20	38	377,--	1 w.
AZV021A	53	103,--	2 w.	DN 40 kvs 25	38	377,--	on st.
AZV022A	52	105,--	2 w.	DN 50 kvs 31,5	38	425,--	1 w.
AZV023A	52	175,--	2 w.	DN 50 kvs 40	38	425,--	on st.
AZV024A	54	134,--	2 w.	DN 65 kvs 63	38	724,--	on st.
AZV025A	54	134,--	2 w.	DN 80 kvs 100	38	866,--	on st.
AZV026A	54	144,--	2 w.	DN 100 kvs 160	38	1 207,--	on st.
AZV027A	54	155,--	2 w.	BKF222AO00			
AZV028A	54	170,--	2 w.	DN 15 kvs 0,63	42	329,--	on st.
AZV029A	54	194,--	2 w.	DN 15 kvs 1,0	42	329,--	on st.
AZV030A	54	346,--	2 w.	DN 15 kvs 1,6	42	329,--	on st.
AZV031A	54	266,--	2 w.	DN 15 kvs 2,5	42	329,--	on st.
AZV032A	54	289,--	2 w.	DN 15 kvs 4,0	42	329,--	on st.
B				DN 20 kvs 5,0	42	346,--	1 w.
BKF102AO00				DN 20 kvs 6,3	42	346,--	on st.
DN 15 kvs 0,63	39	328,--	on st.	DN 25 kvs 8	42	356,--	1 w.
DN 15 kvs 1,0	39	328,--	on st.	DN 25 kvs 10	42	356,--	on st.
DN 15 kvs 1,6	39	328,--	on st.	DN 32 kvs 12,5	42	384,--	1 w.
DN 15 kvs 2,5	39	328,--	on st.	DN 32 kvs 16	42	384,--	on st.
DN 15 kvs 4,0	39	328,--	on st.	DN 40 kvs 20	42	437,--	1 w.
DN 20 kvs 5,0	39	346,--	1 w.	DN 40 kvs 25	42	437,--	on st.
DN 20 kvs 6,3	39	346,--	on st.	DN 50 kvs 31,5	42	480,--	1 w.
DN 25 kvs 8	39	362,--	1 w.	DN 50 kvs 40	42	480,--	on st.
DN 25 kvs 10	39	362,--	on st.	DN 65 kvs 63	42	806,--	on st.
DN 32 kvs 12,5	39	413,--	1 w.	DN 80 kvs 100	42	942,--	on st.
DN 32 kvs 16	39	413,--	on st.	DN 100 kvs 160	42	1 290,--	on st.
DN 40 kvs 20	39	456,--	1 w.	BKG121AO00			
DN 40 kvs 25	39	446,--	on st.	DN 1/2" kvs 0,63	41	212,--	on st.
DN 50 kvs 31,5	39	503,--	1 w.	DN 1/2" kvs 1,0	41	212,--	on st.
DN 50 kvs 40	39	503,--	on st.	DN 1/2" kvs 1,6	41	212,--	on st.
DN 65 kvs 63	39	815,--	on st.	DN 1/2" kvs 2,5	41	212,--	on st.
DN 80 kvs 100	39	978,--	on st.	DN 1/2" kvs 4,0	41	212,--	on st.
DN 100 kvs 160	39	1 358,--	on st.	DN 3/4" kvs 5,0	41	220,--	1 w.
BKF122AO00				DN 3/4" kvs 6,3	41	220,--	on st.
DN 15 kvs 0,63	43	374,--	on st.	DN 1" kvs 8	41	245,--	1 w.
DN 15 kvs 1,0	43	374,--	on st.	DN 1" kvs 10	41	245,--	on st.
DN 15 kvs 1,6	43	374,--	on st.	DN 1 1/4" kvs 12,5	41	295,--	1 w.
DN 15 kvs 2,5	43	374,--	on st.	DN 1 1/4" kvs 16	41	295,--	on st.
DN 15 kvs 4,0	43	374,--	on st.	DN 1 1/2" kvs 20	41	364,--	1 w.
DN 20 kvs 5,0	43	401,--	1 w.	DN 1 1/2" kvs 25	41	364,--	on st.
DN 20 kvs 6,3	43	401,--	on st.	DN 2" kvs 31,5	41	494,--	1 w.
DN 25 kvs 8	43	419,--	1 w.	DN 2" kvs 40	41	494,--	on st.
DN 25 kvs 10	43	419,--	on st.	BKG221AO00			
DN 32 kvs 12,5	43	453,--	1 w.	DN 1/2" kvs 0,63	40	212,--	on st.
DN 32 kvs 16	43	453,--	on st.	DN 1/2" kvs 1,0	40	212,--	on st.
DN 40 kvs 20	43	515,--	1 w.	DN 1/2" kvs 1,6	40	212,--	on st.
DN 40 kvs 25	43	515,--	on st.	DN 1/2" kvs 2,5	40	212,--	on st.
DN 50 kvs 31,5	43	562,--	1 w.	DN 1/2" kvs 4,0	40	212,--	on st.
DN 50 kvs 40	43	562,--	on st.	DN 3/4" kvs 5,0	40	220,--	1 w.
DN 65 kvs 63	43	874,--	on st.	DN 3/4" kvs 6,3	40	220,--	on st.
DN 80 kvs 100	43	1 061,--	on st.	DN 1" kvs 8	40	245,--	1 w.
DN 100 kvs 160	43	1 456,--	on st.	DN 1" kvs 10	40	245,--	on st.
BKF202AO00				DN 1 1/4" kvs 12,5	40	295,--	1 w.
DN 15 kvs 0,63	38	281,--	on st.	DN 1 1/4" kvs 16	40	295,--	on st.
DN 15 kvs 1,0	38	281,--	on st.	DN 1 1/2" kvs 20	40	364,--	1 w.
DN 15 kvs 1,6	38	281,--	on st.	DN 1 1/2" kvs 25	40	364,--	on st.
DN 15 kvs 2,5	38	281,--	on st.	DN 2" kvs 31,5	40	494,--	1 w.
DN 15 kvs 4,0	38	281,--	on st.	DN 2" kvs 40	40	494,--	on st.

Type		Page	Price EUR	Delivery time	Type	Page	Price EUR	Delivery time
B					F			
BLF122AO00					FTT302A00	21	58,--	on st.
DN125 kvs 220	43	3 042,--	2 w.		FTT303A20	21	22,--	on st.
DN150 kvs 320	43	3 900,--	2 w.		FTT303A50	21	31,--	on st.
BLF222AO00					FTT309A00	21	60,--	on st.
DN125 kvs 220	42	2 678,--	2 w.		FTW105B03	20	17,--	on st.
DN150 kvs 320	42	3 391,--	2 w.		FTW305B03	21	17,--	on st.
D					FWH816D02	22	198,--	on st.
DDF122BO00					FWH916A02	16	on re.	on st.
DN 40 kvs 116	33	297,--	on st.		FWR116D02	20	27,--	on st.
DN 50 kvs 116	33	305,--	on st.		FWR316D02	21	30,--	on st.
DN 65 kvs 257	33	321,--	on st.	G				
DN 80 kvs 508	33	341,--	on st.	GM24A	30	371,--	on st.	
DN 100 kvs 925	33	362,--	on st.	GM24A-SR	30	461,--	on st.	
DN 125 kvs 1492	33	430,--	on st.	GM230A	30	378,--	on st.	
DN 150 kvs 2168	33	480,--	on st.	GR24A	33	523,--	on st.	
DS604.03	23	41,--	on st.	GR24A-SR	33	618,--	on st.	
DS604.05	23	41,--	on st.	GR230A	33	523,--	on st.	
DS604.10	23	41,--	on st.	H				
DT501.000	23	109,--	2 w.	H3F120	32	326,--	on st.	
DT501.100	23	109,--	2 w.	H3F125	32	330,--	on st.	
DT501.250	23	109,--	2 w.	H3F132	32	368,--	on st.	
DT692.005	23	511,--	2 w.	H3F140	32	397,--	on st.	
DT692.010	23	511,--	2 w.	H3F150	32	504,--	on st.	
DT692.025	23	511,--	2 w.	H3F165	32	583,--	on st.	
DT692.040	23	511,--	2 w.	H3F180	32	810,--	on st.	
DT692.060	23	511,--	2 w.	H3F1100	32	1 025,--	2 w.	
DT692.100	23	511,--	2 w.	H4F440	32	583,--	2 w.	
DT699.05	23	238,--	on st.	H4F450	32	757,--	2 w.	
DT699.10	23	238,--	on st.	H4F465	32	842,--	2 w.	
DT699.25	23	238,--	on st.	H4F480	32	1 010,--	2 w.	
E					H4F4100	32	1 388,--	on re.
EAB100	18	on re.	2 w.	HG80	23	255,--	on st.	
EAB151	18	on re.	2 w.	HGM	23	99,--	on st.	
EAB151WI	18	on re.	2 w.	I				
EAB201	18	on re.	2 w.	IVL 02	22	275,--	2 w.	
EAB205	18	on re.	2 w.	IVL 10	22	258,--	2 w.	
EAB210	18	on re.	2 w.	IVL 10-400	22	287,--	2 w.	
EAB250	18	on re.	2 w.	IVL 20	22	280,--	2 w.	
EAZ104G	18	on re.	2 w.	IVL 20-400	22	295,--	2 w.	
ES6522SZ Set	25	545,--	on st.	J				
ETR101	16	on re.	1 w.	Joy Fancoil	15	on re.	1 w.	
F					Joy HC	15	on re.	1 w.
FAS	23	146,--	on st.	K				
FBR700A02	49	58,--	on st.	KHK005A02 (MD50)	51	208,--	on st.	
FBR703A02	49	78,--	on st.	KHK005A04Y (MD50-R)	51	208,--	on st.	
FBR704A02	49	80,--	on st.	KKG221AO00				
FBR710A02	49	60,--	on st.	DN 1/2" kvs 0,63	51	177,--	on st.	
FBR715A02	49	80,--	on st.	DN 1/2" kvs 1,0	51	177,--	on st.	
FBR916A02	16	on re.	on st.	DN 1/2" kvs 1,6	51	177,--	on st.	
FTA101A00	20	21,--	on st.	DN 1/2" kvs 2,5	51	177,--	on st.	
FTA201A00	28	21,--	on st.	DN 3/4" kvs 4,0	51	182,--	on st.	
FTA301A00	21	22,--	on st.	DN 3/4" kvs 6,3	51	182,--	on st.	
FTA54VV	22	343,--	on st.	DN 1" kvs 6,3	51	214,--	on st.	
FTH802D02	22	264,--	on st.	DN 1" kvs 8,0	51	214,--	on st.	
FTK119A00	20	53,--	on st.	DN 1" kvs 10	51	214,--	on st.	
FTK319A00	21	56,--	on st.	DN 1 1/4" kvs 10	51	255,--	on st.	
FTT102A00	20	55,--	on st.	DN 1 1/4" kvs 16	51	255,--	on st.	
FTT103A20	20	15,--	on st.	DN 1 1/2" kvs 25	51	357,--	on st.	
FTT108A00	20	57,--	on st.	DN 2" kvs 35	51	388,--	on st.	
FTT109A00	20	56,--	on st.	L				
FTT203A25	28	18,--	on st.	LM24A	30	157,--	on st.	
FTT203A40	28	19,--	on st.	LM24A-S	30	186,--	on st.	
				LM24A-SR	30	211,--	on st.	
				LM230A	30	157,--	on st.	
				LM230A-S	30	186,--	1 w.	

Type	Page	Price EUR	Delivery time	Type	Page	Price EUR	Delivery time	
L				R				
LR24A	35	190,--	1 w.	R3050-40-S4 2"	40	644,--	1 w.	
LR24A-SR	35	248,--	1 w.	R3050-58-S4 2"	58	735,--	1 w.	
LR230A	35	190,--	1 w.	RC7020	25	505,--	on st.	
LRF24-SR	37	397,--	1 w.	RCO 000D-A	14	on re.	on st.	
LRF24-SR-O	37	397,--	1 w.	RCO 000D-B	10	on re.	on st.	
M				RCO 000D-C2	49	on re.	on st.	
Mehrpr. für Montage	38	41,--		RCO 000D-C4	10	on re.	on st.	
MS-NRC	32	34,--	on st.	RCO 000D-E	14	on re.	on st.	
MS-NRE	32	17,--	on st.	RCO 000D-K	10	on re.	on st.	
MS-NRE6	32	17,--	on st.	RCO 000D-L	10	on re.	on st.	
MS-NRH	32	19,--	on st.	RCO 000D-T	10	on re.	on st.	
MS-NRL	32	24,--	1 w.	RCO 8C-fS	48	on re.	on st.	
MS-NRL1	32	56,--	1 w.	RCO 8C-S	48	on re.	on st.	
N				RCO 9C-S	48	on re.	on st.	
NFA	31	350,--	1 w.	RCO 14C-S	48	on re.	on st.	
NFA-S2	31	396,--	1 w.	RCO 16C-E	48	on re.	on st.	
NF24A-SR	31	356,--	1 w.	RCO 16C-S	48	on re.	on st.	
NM24A	30	192,--	on st.	RCO 030A00	15	on re.	on st.	
NM24A-S	30	223,--	on st.	RCO 50C-M	17	on re.	on st.	
NM24A-SR	30	274,--	on st.	RCO 50C-P	17	on re.	on st.	
NM230A	30	197,--	on st.	RCO 110D-S	9	on re.	on st.	
NM230A-S	30	230,--	1 w.	RCO 120D-S	9	on re.	on st.	
NR24-20B	32	215,--	on st.	RCO 210D-S	9	on re.	on st.	
NR24-SR-T	32	329,--	on st.	RCO 211D-S	9	on re.	on st.	
NR230-20B	32	215,--	on st.	RCO 220D-S	9	on re.	on st.	
NR24A	35	236,--	1 w.	RCO 221D-S	9	on re.	on st.	
NR24A-SR	35	331,--	1 w.	RCO 230D-S	9	on re.	on st.	
NR230A	35	236,--	1 w.	RCO 231D-S	9	on re.	on st.	
P				RCO 300D-P	10	on re.	on st.	
P1000A	31	108,--	on st.	RCO 302D-P	10	on re.	on st.	
R				RCO 611D-S	16	on re.	on st.	
R2015-P25-S1 1/2"	0,25	36	99,--	1 w.	RCO 613D-S	16	on re.	on st.
R2015-P4-S1 1/2"	0,4	36	99,--	1 w.	RCO 621D-S	11	on re.	on st.
R2015-P63-S1 1/2"	0,63	36	99,--	1 w.	RCO 630D-S	14	on re.	on st.
R2015-1-S1 1/2"	1,0	36	99,--	1 w.	RCO 686D-S	11	on re.	on st.
R2015-1P6-S1 1/2"	1,6	36	99,--	1 w.	RCO 696D-S	11	on re.	on st.
R2015-2P5-S1 1/2"	2,5	36	99,--	1 w.	RCO 690D-S	49	on re.	on st.
R2015-4-S1 1/2"	4,0	36	99,--	1 w.	RCO 800D-M	12	on re.	on st.
R2015-6P3-S1 1/2"	6,3	36	99,--	1 w.	RCO 800D-W	12	on re.	on st.
R2020-4-S2 3/4"	4,0	36	111,--	1 w.	RCO 814D-E	14	on re.	on st.
R2020-6P3-S2 3/4"	6,3	36	111,--	1 w.	RCO 816D-E	14	on re.	on st.
R2020-8P6-S2 3/4"	8,6	36	111,--	1 w.	RCO 830D-M	13	on re.	on st.
R2025-6P3-S2 1"	6,3	36	133,--	1 w.	RCO 830D-W	13	on re.	on st.
R2025-10-S2 1"	10	36	133,--	1 w.	RCO 850D-M	13	on re.	on st.
R2025-16-S2 1"	16	36	133,--	1 w.	RCO 900D-M	7	on re.	on st.
R2032-16-S3 1 1/4"	16	36	186,--	1 w.	RCO 900D-W	7	on re.	on st.
R2040-16-S3 1 1/2"	16	36	224,--	1 w.	RCO 920D-M	8	on re.	on st.
R2040-25-S3 1 1/2"	25	36	224,--	1 w.	RCO 920D-W	8	on re.	on st.
R2050-25-S4 2"	25	36	294,--	1 w.	RCO 921D-M	8	on re.	on st.
R2050-40-S4 2"	40	36	294,--	1 w.	RCO 921D-W	8	on re.	on st.
R3015-P25-S1 1/2"	0,25	35	162,--	1 w.	RCO ER440A02	15	on re.	on st.
R3015-P4-S1 1/2"	0,4	35	162,--	1 w.	RCO ER450A02	15	on re.	on st.
R3015-P63-S1 1/2"	0,63	35	162,--	1 w.	RCO-view 100	49	on re.	on st.
R3015-1-S1 1/2"	1,0	35	162,--	1 w.	RCO-view 300	49	on re.	on st.
R3015-1P6-S1 1/2"	1,6	35	162,--	1 w.	RCO-view 1000	49	on re.	on st.
R3015-2P5-S1 1/2"	2,5	35	162,--	1 w.	RCO-view 2500	49	on re.	on st.
R3015-4-S1 1/2"	4,0	35	162,--	1 w.	RCO-view 5000	49	on re.	on st.
R3020-4-S2 3/4"	4,0	35	181,--	1 w.	RCO-view 9999	49	on re.	on st.
R3020-6P3-S2 3/4"	6,3	35	181,--	1 w.	RCO-view DV	49	for Partner	on st.
R3025-6P3-S2 1"	6,3	35	226,--	1 w.	RCO-tool	17	for Partner	on st.
R3025-10-S2 1"	10	35	226,--	1 w.	RDO383A110	26	1 030,--	on st.
R3032-16-S3 1 1/4"	16	35	316,--	1 w.	REN224A00	19	74,--	on st.
R3040-16-S3 1 1/2"	16	35	389,--	1 w.	REN264A00	19	72,--	on st.
R3040-25-S4 1 1/2"	25	35	442,--	1 w.	REN265A00	19	95,--	on st.
R3050-25-S4 2"	25	35	453,--	1 w.				

Page 6



Master-Controller

Free programmable for network operation with 64 MByte DDR2 RAM, 32 MBit Flash and slot for SD-Memory Card as data and program memory. As BACnet Building Controller the Master Controller supports on demand the BACnet protocol according to the BACnet Standard ISO16484-5:2012. Options for the Data Link Layer of the BACnet Building Controller (B-BC): BACnet/Ethernet, BACnet/IP, BACnet/MSTP and BACnet/PTP. Router functionality according to Clause 6. BBMD (BACnet/IP Broadcast Management Device) function can be activated if required.

Interfaces and protocols:

- 2 x Ethernet Interface (In/Out with integrated Hub-Functionalities) for the peer-to-peer communication based on Ethernet for the connection of Master and Network-Controllers within the Network and the connection to the BMS-Software RCO-view.
- 2 x RS232 Interface: Used for the connection to BMS RCO-view, pc, analogue/gsm messenger, modem and printer as well as for the connection of the already implemented protocols.
- 2 x RS485 Interface: For the connection of the already implemented protocols as well as for the communication to the Controlesta RCO C Master network.
- E-mailing (alarms, historical data, data point lists) direct from the controller
- 1 x L-Bus1-connection with selectable speed for the connection of up to 32 Slave-Modules RCO C.
- 1 x L-Bus2-connection with selectable speed for the connection of up to 32 I/O-Modules RCO D.
- Battery back up for the real time clock

The implemented standard protocols such as ASCII, Modbus RTU Master/Slave, Modbus TCP/IP Master/Slave, M-Bus, Wilo, Grundfos, RCO C and BACnet can be combined with the integrated interfaces (Ethernet/RS232/RS485) (see data sheet). Programming of all functionality takes place with the Engineering Software Controlesta RCO-tool. The programming can be done text oriented or graphically. Suitable for DIN-rail-mounting, power consumption 5 W. Power supply 24 VAC/DC +/-10 %, supply voltage 24 VDC +/-10%, IP 20, ABS-housing W x H x D: 160 x 136 x 35 mm.

Type **Price**
in EUR

RCO900D-M on request

As RCO900D-M, however additionally

- with an **integrated Web server** for the visualization and operation of plant data and alarms via Intranet or Internet with a standard web browser. Trendlog indication via browser. The HTML5 pages are designed comfortably and efficiently with the RCO-tool.

RCO900D-W on request

Type Price
in EUR



Master-Controller

Free programmable with an integrated coloured LCD display 3,5", resolution 320 x 240 Pixel, Navigation via knob (turn and push) for network operation with 64 MByte DDR2 RAM, 32 MBit Flash and slot for SD-Memory Card as data and program memory. As BACnet Building Controller the Master Controller supports on demand the BACnet protocol according to the BACnet Standard ISO16484-5:2012. Options for the Data Link Layer of the BACnet Building Controller (B-BC): BACnet/Ethernet, BACnet/IP, BACnet/MSTP and BACnet/PTP. Router functionality according to Clause 6. BBMD (BACnet/IP Broadcast Management Device) function can be activated if required.

Interfaces and protocols:

- 2 x Ethernet Interface (In/Out with integrated Hub-Functionalities) for the peer-to-peer communication based on Ethernet for the connection of Master and Network-Controllers within the Network and the connection to the BMS-Software RCO-view.
- 2 x RS232 Interface: Used for the connection to BMS RCO-view, pc, analogue/gsm messenger, modem and printer as well as for the connection of the already implemented protocols.
- 2 x RS485 Interface: For the connection of the already implemented protocols as well as for the communication to the Controlesta RCO C Master network.
- E-mailing (alarms, historical data, data point lists) direct from the controller
- 1 x L-Bus1-connection with selectable speed for the connection of up to 32 Slave-Modules RCO C.
- 1 x L-Bus2-connection with selectable speed for the connection of up to 32 I/O-Modules RCO D.
- Battery back up for the real time clock

The implemented standard protocols such as ASCII, Modbus RTU Master/Slave, Modbus TCP/IP Master/Slave, M-Bus, Wilo, Grundfos, RCO C and BACnet can be combined with the integrated interfaces (Ethernet/RS232/RS485) (see data sheet). Programming of all functionality takes place with the Engineering Software Controlesta RCO-tool. The programming can be done text oriented or graphically. Suitable for DIN-rail-mounting, power consumption 5 W. Power supply 24 VAC/DC +/-10 %, supply voltage 24 VDC +/-10%, IP 20, ABS-housing W x H x D: 160 x 136 x 35 mm.

RCO920D-M on request

As RCO920D-M, however additionally

- with an **integrated Web server** for the visualization and operation of plant data and alarms via Intranet or Internet with a standard web browser. Trendlog indication via browser. The HTML5 pages are designed comfortably and efficiently with the RCO-tool.

RCO920D-W on request



As RCO920D-M, however additionally

Interfaces and protocols:

- 2 x RS232 Interface: Used for the connection to BMS RCO-view, PC, analogue/gsm modem, messenger, and printer as well as for the connection to the implemented M-Bus protocol, BACnet PTP.
- 1 x Ethernet Interface for the peer-to-peer communication based on Ethernet for the connection of Master and Network-Controllers within the Network and the connection to the BMS-Software RCO-view, BACnet IP/Ethernet.
- 1 x L-Bus2-connection with selectable speed for the connection of up to 8 I/O-Modules RCO D.
- Available protocols: Refer to the data sheet.

RCO921D-M on request

As RCO721D-M, however additionally

- with an **integrated Web server** for the visualization and operation of plant data and alarms via Intranet or Internet with a standard web browser. The HTML5 pages are designed comfortably and efficiently with the RCO-tool.

RCO921D-W on request

Type **Price**
in EUR

Universal Input Module

Universal Input Module with network connection via L-Bus2.

- 8 Universal Inputs (NTC10k Ω , NTC30k Ω , NTC4,7k Ω , NTC-Satchwell, PTC1k, TAC, Pt1000, Ni1000, RFB215, 0 ... 10VDC) universally adaptable via data point function, also useable as digital input.

Per input a configurable two-coloured LED is integrated. For DIN-rail- or panel door mounting, power consumption 2,8 W, Bus- and power supply via T-Bus-connector. IP Protection: 20, ABS-housing W x H x D, 22,5 x 97 x 125 mm.

RCO110D-S on request

Digital Input Module

Digital Input Module with network connection via L-Bus2.

- 8 Digital Inputs (potential free or -marked contacts 24 VAC/DC)
Counter up to 20 Hz, 24 VAC/DC, Pulse length > 1 ms

Per input a configurable two-coloured LED is integrated. For DIN-rail- or panel door mounting, power consumption 1,6 W, Bus- and power supply via T-Bus-connector. IP Protection: 20, ABS-housing W x H x D, 22,5 x 97 x 125 mm.

RCO120D-S on request

Analogue Output Module

Analogue Output module with network connection via L-Bus2.

- 4 Analogue Outputs (0 ... 10VDC)

Per input a configurable two-coloured LED is integrated. For DIN-rail- or panel door mounting, power consumption 2,4 W, Bus- and power supply via T-Bus-connector. IP Protection: 20, ABS-housing W x H x D, 22,5 x 97 x 125 mm.

RCO210D-S on request

Analogue Output Module with man. overr. ability

Analogue Output Module with network connection via L-Bus2.

- 4 Analogue Outputs (0 ... 10VDC)
- 4 Manual override elements A(uto), 0 ... 100%.

Per input a configurable two-coloured LED is integrated. For DIN-rail- or panel door mounting, power consumption 2,4 W, Bus- and power supply via T-Bus-connector. IP Protection: 20, ABS-housing W x H x D, 22,5 x 97 x 125 mm.

RCO211D-S on request

Digital Output Module

Digital Output Module with network connection via L-Bus2.

- 4 Digital Outputs (230 V / 4 A / Change over contact)

Per input a configurable two-coloured LED is integrated. For DIN-rail- or panel door mounting, power consumption 2,9 W, Bus- and power supply via T-Bus-connector. IP Protection: 20, ABS-housing W x H x D, 22,5 x 97 x 125 mm.

RCO220D-S on request

Digital Output Module with man. overr. ability

Digital Output Module with network connection via L-Bus2.

- 4 Digital Outputs (230 V / 4A / Change over contact)
- 4 Manual override elements A(uto), 0 , 1.

Per input a configurable two-coloured LED is integrated. For DIN-rail- or panel door mounting, power consumption 2,9 W, Bus- and power supply via T-Bus-connector. IP Protection: 20, ABS-housing W x H x D, 22,5 x 97 x 125 mm.

RCO221D-S on request

Tri-state Output Module

Output Module with network connection via L-Bus2.

- 2 Tri-state Outputs with Change over contact 230V / 4A

Per input a configurable two-coloured LED is integrated. For DIN-rail- or panel door mounting, power consumption 2,9 W, Bus- and power supply via T-Bus-connector. IP Protection: 20, ABS-housing W x H x D, 22,5 x 97 x 125 mm.

RCO230D-S on request








Tri-state Output Module, manual override ability

Output Module with network connection via L-Bus2.

- 2 Tri-state Outputs with Change over contact 230V / 4A
- 2 Manual override elements A(uto), I O I.

Per input a configurable two-coloured LED is integrated. For DIN-rail- or panel door mounting, power consumption 2,9 W, Bus- and power supply via T-Bus-connector. IP Protection: 20, ABS-housing W x H x D, 22,5 x 97 x 125 mm.

RCO231D-S on request

		Type	Price in EUR
	Power-Module		
	The Power Module is used for the power supply of up to 32 I/O-Modules. Output voltage 24 VDC +/-10 %. For DIN-rail- or panel door mounting, power consumption 1,7 W, Supply voltage 24 VAC/DC +/-10 %. IP Protection: 20, ABS-housing W x H x D, 22,5 x 97 x 125 mm.	RCO300D-P	on request
	Power-Bridge-Module		
	The Power Module is used for the power supply of up to 32 I/O-Modules. Output voltage 24 VDC +/-10 %. The out and input voltage are galvanically separated. For DIN-rail- or panel door mounting, power consumption 1,7 W, Supply voltage 24 VAC/DC +/-10 %. IP Protection: 20, ABS-housing W x H x D, 22,5 x 97 x 125 mm.	RCO302D-P	on request
	Accessories		
	Empty housing		
	Empty housing as substitute for planned extension. For DIN-rail- or panel door mounting. ABS-housing W x H x D, 22,5 x 97 x 125 mm.	RCO000D-L	on request
	Blind covers I/O-modules		
	1 pair blind covers for the sidewise coverage of the panel door cutting.	RCO000D-B	on request
	T-Bus-Connector		
	T-Bus Connector with 5 pins for the bus- and power supply of the input/output modules. Pre-mounted on DIN rail for the simple assembly of the I/O-Modules.	RCO000D-T	on request
	T-Bus-connection terminals		
	T-Bus-connection terminals with 5 pins for the bus- and power supply between the master and the I/O Modules as well as for the change of the DIN rail row.	RCO000D-K	on request
	SD-Memory-Card		
	SD-Memory-Card with 4 GB for data and program memory suitable for the Controllers RCO621D-S / RCO8... / RCO9... Not suitable for RCO 5... / RCO 7...)	RCO000D-C4	on request

Type **Price**
in EUR



Operator panel

Operator panel with LCD coloured graphical display 3,5", resolution 320 x 240 Pixel, Navigation via knob (turn and push). For panel door mounting. (SD-Memory Card required).

- 1 x Ethernet interface for the connection to Master-, Network- or Compact Controller.

Power consumption 5 W, 24 VDC +/-10 %. IP protection: IP 20, ABS-housing B x H x T, 160 x 136 x 35 mm.

RCO621D-S on request

New touch operator panels

Compared to the previous models RCO685D-S and RCO695D-S, the touch control panels RCO686D-S and RCO696D-S have a larger system memory (4GB), a faster processor and use Android 10 as the operating system. The installation dimensions have remained the same.



Touch operator panel 10,1"

10,1" TFT-LCD Touch operator panel, active display 217 x 136 mm, resolution 1280 x 800 Pixel, Contrast ratio 700:1, brightness 400 cd/m², response time 5 ms, backlight. Pre-configured for web server connection. For door mounting, power supply 12 ... 36 VDC, power consumption 15 W, housing B x H x T, 294 x 194 x 54 mm, cutout dimension B x H, 275,5 x 175,5 mm, IP protection: IP 65.

RCO686D-S on request

NEW



Touch operator panel 15,6"

15,6" TFT-LCD Touch operator panel, active display 344 x 194 mm, resolution 1920 x 1080 Pixel, Contrast ratio 700:1, brightness 400 cd/m², response time 5 ms, backlight. Pre-configured for web server connection. For door mounting, power supply 12 ... 36 VDC, power consumption 20 W, housing B x H x T, 420 x 269 x 70 mm, cutout dimension B x H, 403 x 252 mm, IP protection: IP 65.

RCO696D-S on request

NEW



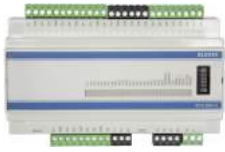
SD-Memory-Card

SD-Memory-Card with 4 GB for data and program memory suitable for the Controllers RCO621D-S / RCO8... / RCO9... Not suitable for RCO 5... / RCO 7...)

RCO000D-C4 on request

Type Price
in EUR

RCO800D-M on request



Network-Controller

Free programmable for network operation with 64 MByte DDR RAM, 32 MBit Flash and slot for SD-Memory Card as data and program memory. As BACnet Building Controller the Master Controller supports on demand the BACnet protocol according to the BACnet Standard ISO16484-5:2012. Options for the Data Link Layer of the BACnet Building Controller (B-BC): BACnet/Ethernet, BACnet/IP, BACnet/MSTP und BACnet/PTP. Router functionality according to Clause 6. BBMD (BACnet/IP Broadcast Management Device) function can be activated if required. I/O's expandable with Expander Modules.

Inputs and outputs:

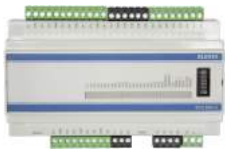
- 8 Universal Inputs (NTC10k Ω , NTC30k Ω , NTC4,7k Ω , NTC-Satchwell, PTC1k, TAC, Pt1000, Ni1000, RFB215, 0 ... 10 VDC, 0 ... 20 mA) universally adaptable via data point function, also useable as digital input.
- 6 Digital Inputs (potential free or -marked contacts 24 VAC/DC) Counter up to 20 Hz, 24 VAC/DC, Pulse length > 1 ms
- 4 Analogue Outputs (0 ... 10 VDC, 0 ... 20 mA)
- 4 Digital Outputs (230 V / 4 A)

Interface and protocols:

- 1 x Ethernet Interface for the peer-to-peer communication based on Ethernet for the connection of Master and Network-Controllers within the Network and the connection to the BMS-Software RCO-view.
- 1 x RS232 Interface: Used for the connection to BMS RCO-view, pc, analogue/gsm messenger, modem and printer as well as for the connection of the already implemented protocols.
- E-mailing (alarms, historical data, data point lists) direct from the controller
- 1 x RS485_1 Interface: For the connection of the already implemented protocols as well as for the communication to the Controlesta RCO C Master network.
- 1 x RS485_2 Interface: For the connection of up to 4 text oriented operator panels RCO630D-S and the already implemented protocols.
- 1 x SPI Expander Interface (up to 2 Expansion modules can be connected)
- Battery back up for the real time clock

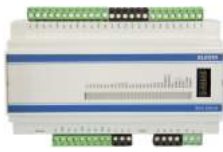
The implemented standard protocols such as ASCII, Modbus RTU Master/Slave, Modbus TCP/IP Master/Slave, M-Bus, Wilo-Bus, Grundfos-Bus, RCO C and BACnet can be combined with the integrated interfaces (Ethernet/RS232/RS485) (see data sheet). Programming of all functionalities takes place with the Engineering Software Controlesta RCO-tool. The programming can be done text oriented or graphically. Suitable for DIN-rail-mounting, power consumption 10 W. Power supply 24 VAC/DC +/-10%, IP 20, ABS-housing W x H x D: 156 x 112 x 58 mm.

RCO800D-W on request



As RCO800D-M, however additionally

- with an **integrated Web server** for the visualization and operation of plant data and alarms via Intranet or Internet with a standard web browser. Trendlog indication via browser. The HTML5 pages are designed comfortably and efficiently with the RCO-tool.



Network-Controller

Free programmable for network operation with 64 MByte DDR2 RAM, 32 MBit Flash and slot for SD-Memory Card as data and program memory. I/O's expandable with Expander Modules.

Inputs and outputs:

- 8 Universal Inputs (NTC10k Ω , NTC30k Ω , NTC4,7k Ω , NTC-Satchwell, PTC1k, TAC, Pt1000, Ni1000, RFB215, 0 ... 10 VDC, 0 ... 20 mA) universally adaptable via data point function, also useable as digital input.
- 6 Digital Inputs (potential free or -marked contacts 24 VAC/DC) Counter up to 20 Hz, 24 VAC/DC, Pulse length > 1 ms
- 4 Analogue Outputs (0 ... 10 VDC, 0 ... 20 mA)
- 4 Digital Outputs (230 V / 4 A)

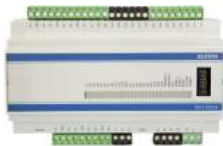
Interface and protocols:

- 1 x Ethernet Interface for the peer-to-peer communication based on Ethernet for the connection of Network-Controllers within the RCO D Network and the connection to the BMS-Software RCO-view, Ethernet protocol is supported.
- 1 x RS232 Interface: Used for the connection to BMS RCO-view, pc, analogue/gsm messenger, modem and printer.
- E-mailing (alarms, historical data, data point lists) direct from the controller
- 1 x RS485_2 Interface: For the connection of up to 4 text oriented operator panels RCO630D-S
- 1 x SPI Expander Interface (up to 2 Expansion modules can be connected)
- Battery back up for the real time clock

Programming of all functionalities takes place with the Engineering Software Controlesta RCO-tool. The programming can be done text oriented or graphically. Suitable for DIN-rail-mounting, power consumption 10 W. Power supply 24 VAC/DC +/-10%, IP 20, ABS-housing W x H x D: 156 x 112 x 58 mm.

Type Price
in EUR

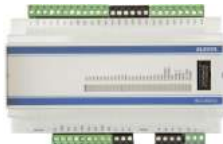
RCO830D-M on request



As RCO830D-M, however additionally

- with an **integrated Web server** for the visualization and operation of plant data and alarms via Intranet or Internet with a standard web browser. Trendlog indication via browser. The HTML5 pages are designed comfortably and efficiently with the RCO-tool.

RCO830D-W on request



Compact-Controller

Free programmable Compact-Controller for **stand alone** operation with 64 MByte DDR RAM, 32 MBit Flash and slot for SD-Memory Card as data and program memory. I/O's expandable with the Expander Module.

Inputs and outputs:

- 8 Universal Inputs (NTC10k Ω , NTC30k Ω , NTC4,7k Ω , NTC-Satchwell, PTC1k, TAC, Pt1000, Ni1000, RFB215, 0 ... 10 VDC, 0 ... 20 mA) universally adaptable via data point function, also useable as digital input.
- 6 Digital Inputs (potential free or -marked contacts 24 VAC/DC) Counter up to 20 Hz, 24 VAC/DC, Pulse length > 1 ms
- 4 Analogue Outputs (0 ... 10 VDC, 0 ... 20 mA)
- 4 Digital Outputs (230 V / 4 A)

Interface and protocols:

- 1 x RS232 Interface: Used for the connection to pc, analogue/gsm modem, messenger and printer.
- 1 x RS485_2 Interface: For the connection of up to 4 text oriented operator panels RCO630D-S
- 1 x Expander interface (Max. 2 Expansion modules can be connected)
- Battery back up for the real time clock

RCO850D-M on request

Type **Price**
in EUR

Digital Expander I/O-Module for RCO8...

Connection to RCO 8... by adapter cable RCO000D-E.

Inputs and outputs:

- 8 Digital Inputs (potential free or -marked contacts 24 VAC/DC) Counter up to 20 Hz, 24 VAC/DC, Pulse length > 1 ms
- 6 Digital Outputs (230 V / 4 A)

DIN-rail mounting, operating voltage supplied by network-Controller, power consumption 8,5 W, IP Protection: 20, ABS-housing B x H x T: 105 x 112 x 58 mm.

Consisting of:

- Digital Expander I/O-Module RCO814D-E
- Connector cable length 10 cm RCO000D-E

RCO814D-E on request



Analogue Expander I/O-Module for RCO8...

Connection to RCO 8... by adapter cable RCO000D-E.

Inputs and outputs:

- 8 Universal Input (NTC10kΩ, NTC30kΩ, NTC4,7kΩ, NTC-Satchwell, PTC1k, TAC, Pt1000, Ni1000, RFB215, 0...10VDC) over data point function universal adjustable, also useable as digital input..
- 4 Analogue Outputs (0 ... 10 VDC)
- 4 Digital Outputs (230 V / 4 A)

DIN-rail mounting, operating voltage supplied by network-Controller, power consumption 8,5 W, IP Protection: 20, ABS-housing B x H x T: 105 x 112 x 58 mm.

Consisting of:

- Digital Expander I/O-Module RCO816D-E
- Connector cable length 10 cm RCO000D-E

RCO816D-E on request



Operator panel for Controller RCO8...

Text oriented Operator Panel for the connection to RCO5... The display is arranged in 3 lines by 30 characters. Panel door mounting, power consumption: 2,0 VA, operating voltage supplied over RS485_2, IP Protection: IP20. ABS-housing W x H x D: 160 x 136 x 35 mm.

RCO630D-S on request



Operator panel with LCD coloured graphical display 3,5", resolution 320 x 240 Pixel, Navigation via knob (turn and push). For panel door mounting.

- 1 x Ethernet interface for the connection to Master-, Network- or Compact Controller. Power consumption 5 W, 24 VDC +/-10 %. IP protection: IP 20, ABS-housing B x H x T, 160 x 136 x 35 mm.

RCO621D-S on request



Touch operator panel 10,1"

10,1" TFT-LCD Touch operator panel, active display 217 x 136 mm, resolution 1280 x 800 Pixel, Contrast ratio 700:1, brightness 400 cd/m², response time 5 ms, backlight. Pre-configured for web server connection. For door mounting, power supply 12 ... 36 VDC, power consumption 11 W, housing B x H x T, 294 x 194 x 54 mm, cutout dimension B x H, 275,5 x 175,5 mm

RCO686D-S on request

NEW



As RCO686D-S, however 15,6" TFT-LCD, active display 344 x 194 mm, resolution 1920 x 1080, consumption 20 W, housing B x H x T, 420 x 269 x 70 mm, cutout dimension B x H, 403 x 252 mm.

RCO696D-S on request

NEW

SD-Memory-Card

SD-Memory-Card with 4 GB for data and program memory suitable for the Controllers RCO621D-S / RCO8... / RCO9...

RCO000D-C4 on request



Connector cable RCO8... to RCO514D-E

Connector cable length 35 mm from Controller RCO8... to RCO514D-E

RCO000D-A on request



Connector cable RCO8... to RCO814D-E + RCO816

Connector cable length 10 mm from Controller RCO8... to RCO814D-E and RCO816D-E

RCO000D-E on request



Type Price
in EUR



Single room controller for Modbus RTU RS485

The networkable single room controller RCO ER440A02 with integrated display can be used as network component of the Controlesta product range. The controller supports single room applications for 4-pipe systems and provides two 0...10 VDC outputs and alternatively two 2-point outputs for the control of the heating and cooling sequences. The fan can be controlled directly via a 0...10 VDC output. The control of a multi stage fan can be realised with the relay module RCO 030A00. Additionally a demand dependent and energy saving fan can be controlled in dependency of a connected CO2 sensor. Two further inputs for the connection of an external switch (PIR / day- / night switch) as well as an external NTC 10k Sensor / door or window contact / condensing switch completes the controller.

RCO ER440A02 on request



As RCO ER440A02, however

- for 2-pipe system,
- an output for heating/cooling, useable control, ON-OFF/tri-state.

RCO ER450A02 on request



Accessories

The coupling module RCO 030A00 can be used for the control of a 3 stage fan for the single room controllers RCO ER440A02 and RCO ER450A02

RCO 030A00 on request

Features:

- 3 switching potential free 2-point outputs for the control of a 3 stage fan
- 3 relays 230 VAC 10 A resistive
- 3 LED's for the indication of the actual switching situation of the relays – supply voltage 24 VAC/DC.



Fancoil controller for Modbus

The Modbus RTU controller with an integrated 2.5" LCD display with a touch surface is used to control a 3-speed fan. It is designed for fan coil units with 2 and 4-pipe systems. 3 time channels, each with 4 time segments, can be set via the parameters. 5 x relay NO contact outputs (2x heating & cooling 240 V, load max. 500 mA (Triac), (3x fan stages, 240 V, load max. 3 A) Network technology: RS485 Modbus Voltage supply: 85 ... 260 VAC, measuring range humidity, 0 ... 100% rH without condensation, temperature measuring range: 0 ... +50 °C Temperature accuracy: ±1 K (typ. at 21 °C)

Joy Fancoil on request

Inputs:

DI1: Input for NTC10k or floating contact

DI2: Digital input, for non-floating contact (230 VAC)

Display: LCD 2.5" 240x160 px, backlight cold white

Housing color: pure white, dimensions H x W x D 140 x 78 x 35 mm, housing material: PC, white, glass, degree of protection IP30, flush-mounting in a standard flush-mounted box (Ø=60 mm, depth at least 45 mm).



HC controller for Modbus

Room controller with integrated 2.5" LCD display with a touch surface. For individual temperature control, e.g. in hotel rooms or offices with fan control. The internal controller calculates control variables for heating/cooling applications. The possible integration of various external sensors (e.g. window contacts, change-over, condensation monitor, etc.) allows temperature control tailored to the application. The device can be installed in a commercially available flush-mounted box. Other versions of the controller on request. Application/Type: Fan coil controller Functions: Hardware outputs, heating + cooling relay, change-over, integrated PI and two-point/three-point controller, frost protection, window/door monitoring

Joy HC on request

Inputs:

1x input for NTC10k or potential-free contact

1x input for non-floating contact (230 VAC)

Output voltage: 0 ... 10 VDC, activation of 6-way valve



Switch contact output: 2 x NO contact, 1 x heating, 1 x cooling, load max. 500 mA (240 V, Triac)

Power supply: 85 ... 260 VAC

Interface: RS485 Modbus

Display: LCD 2.5" 240x160 px, backlight cold white

Housing color: pure white, dimensions H x W x D 140 x 78 x 35 mm, housing material: PC, white, glass, degree of protection IP30, flush-mounting in a standard flush-mounted box (Ø=60 mm, depth at least 45 mm).

		Type	Price in EUR
	<p>Setpoint adjuster for Modbus RTU RS485</p> <p>Setpoint adjuster with LCD display and background lighting, flush mounted. Adjustment of the night and day setpoints, switchable from occupied to non occupied, fan stage „Auto, 1, 2, 3“ , internal and termination for external room temperature sensor (NTC 10k). 2 x digital inputs for window contact or presence sensor. Indication: heating, cooling, fan stages, temperature, occupied/non occupied, setpoints, digital inputs and time. Supply voltage 24 VAC/DC, ABS-housing. Protection class IP 30.</p>	FBR916A02	on request
	<p>As FBR916A02, however with internal humidity sensor and indication of the rel. humidity.</p>	FWH916A02	on request
	<p>Room operating unit for Modbus RTU RS485</p> <p>The room operating unit has a 3,5" (320 x 240 px) touch screen color display. The backlight level is adjustable. Temperature set point, fan speed and occupy information can be changed by using the display buttons. Supply voltage 24 VAC/DC, ABS-housing 100 x 105 x 20 mm.</p>	RCO611D-S	on request
	<p>As RCO 611D-S, however with internal CO₂ measurement (0 ... 2000 ppm).</p>	RCO613D-S	on request
	<p>Room control for Modbus RTU RS485</p> <p>The Modbus room temperature control unit measures the room temperature and displays the current value. The target temperature is changed with the touch buttons + and -. The operator panel is a Modbus slave with an RS485 interface and RTU protocol. Connection voltage 24 VDC +/-10% Housing: plastic, glass, color, signal white, dimensions H x W x D 81.5 x 81.5 x 12 mm, mounting on wall or on flush-mounted box.</p>	ETR101	on request
 <div data-bbox="113 1507 287 1653"> <p>Further Versions on request!</p> </div>	<p>Touch screen room controller</p> <p>The Modbus RTU controller with integrated 3.5" color touch screen is used for air conditioning of rooms. It features up to two levels of heating and cooling temperature control, fan speed control and humidity control. The devices can be used in various air conditioning applications: fan coil units, chilled ceilings and zone heating/cooling systems. The controller has 2 x analogue 0 ... 10 VDC outputs, three relays for fans and a 7-day clock for planning the operating modes. The controller offers PI control for accurate energy efficiency. Connection voltage 230 VAC Housing colour: black, dimensions H x W x D 88 x 112 x 43 mm, protection class IP20, flush-mounted installation in a standard flush-mounted box (Ø=60 mm, depth at least 45 mm).</p>	TRC	on request

Type **Price**
in EUR



New building control system

Web-based building control system on dedicated hardware for operation, monitoring and networking of operational systems of the building automation system Controlesta RCO as well as MyTEM Homeautomation. Integrated, web-based engineering interface for on- and offline programming, freely configurable, animatable site images for graphical site operation, alarm and message management. Access management for operators and operator groups, event monitoring, display of historical data, online trends. Multisite capable.

Additional services such as VPN connection can be added.

As soon as the new building control system is available, you will be informed via newsletter and announcement on the homepage.

available 4th quarter

NEW



Engineering Software Controlesta RCO-tool

The Controlesta RCO-tool serves the efficient and economic programming of Controlesta RCO D Installations. It supports the engineering process starting from the plant configuration via the programming (text or graphical) until the commissioning and documentation.

RCO-tool for Partner



Connector Cable RS232

Cable to connect a RCO 5..D., RCO7..D., RCO8..D., RCO9..D., RCO 16C-M, or RCO Compact to a PC.

RCO50C-P on request








Cable to connect a RCO 5..D., RCO7..D., RCO8..D., RCO9..D., RCO 16C-M, or RCO Compact to a Modem.

RCO50C-M on request

		Type	Price in EUR
	TOSIBOX® Lock (100) TOSIBOX® Lock is an intelligent remote access and networking device that serves as an endpoint for secure remote connections. The remote controlled device has to be connected with the Lock by a network cable or WLAN. The Lock can be connected with any existing Internet connection. The use of 2G/3G/4G USB Modems for applications without local Internet is also possible. For commissioning of the TOSIBOX® Lock no software installation or network configuration is necessary. A Lock enables the remote connection of different Keys and other Locks.	**EAB100	on request
	TOSIBOX® Lock (210) as EAB 100, however can manage up to 20 VPN connection.	**EAB121	on request
	TOSIBOX® Lock (210) as EAB 100, however can manage up to 20 VPN connection and integrated WIFI.	**EAB125	on request
	TOSIBOX® Lock (210) as EAB 100, however can manage up to 50 VPN connection. Without Power source.	**EAB151	on request
	Software license 1 additional Mobile Client for one Key TOSIBOX® Mobile Client Software license complement the existing TOSIBOX® Systems about mobile devices and enable the easy and secure remote access from Android based Smart phones and tablets	**EAB201	on request
	As EAB201, however 5 Mobile-Clients for one Key	**EAB205	on request
	As EAB201, however 10 Mobile-Clients for one Key	**EAB210	on request
	TOSIBOX® Key with Mobile Client (100) TOSIBOX® Key is an intelligent crypto processing USB device that enables a secure connection between your e.g. computer and one or more Tosibox Locks. After personalization of the Key with the Lock, the Key can be used at any computer. Connections are established automatically through a secure, encrypted VPN between TOSIBOX® Lock and Key, giving you full visibility and control over the network devices connected to the Lock. One Key gives access to several Locks. TOSIBOX® Mobile Client Software license complement the existing TOSIBOX® Systems about mobile devices and enable the easy and secure remote access from Android based Smart phones and tablets.	**EAB250	on request
	4G USB-Modem DIN rail mounting, AT commands, language english, compatible, power supply via lock USB.	**EAB250	on request
		**EAB250	on request

** not a stock item

		Type	Price in EUR
	Two-State Relay Pack		
	1 Channel with Manual Override		
	Relay pack is connected to an analogue output (0 ... 10 VDC) of an universal controller. Auto-0-1 facility and feedback terminal connectors. LED indicates state of relay. DIN rail mounting. Relay output: Inductive load 6 A / 250 VAC. Power rating 2 VA, supply voltage 24 VAC +/- 20%	REN264A00	72,--
	Tri-State Relay Pack		
	1-Channel with Manual Override		
	Relay pack is connected to an analogue output (0 ... 5 ... 10 VDC) of an universal controller. Manu-0-1-2-Auto facility and feedback terminal connectors. LED indicates state of relay. DIN rail mounting. 2 Relay outputs: Inductive load 6 A / 250 VAC. Power rating 2,5VA, supply voltage 24 VAC +/- 20%	REN265A00	95,--
	Analogue Hand-Auto Module		
	1-Channel		
	The module is connected to an analogue output of an universal controller. The output can be manually overridden if the switch is set to Manu. The LED intensity indicates the output voltage. DIN rail enclosure. Power rating: 0,6 VA, supply voltage 24 VAC +/- 20%	REN266B00	76,--
	Two-State Relay Pack		
	1-Channel with Manual Override		
	Relay pack is connected to a digital output (0 or 24 VAC) of an universal controller. Auto-0-Hand facility and feedback terminal connectors. LED indicates state of relay. DIN rail mounting. Relay output: Inductive load 6 A / 250 VAC. Power rating: 0,4 VA, supply voltage 24 VAC +/- 20%	REN267A00	66,--
	2 x Two-State Relay Pack		
	1 Channel with Manual Override		
	Relay pack is connected to an analogue output (0 ... 5 ... 10 VDC) of an universal controller. Manu-Auto, 0-1-2 facility and feedback terminal connectors. 2 LED's indicate the state of each relay. DIN rail mounting. 2 relay outputs: Inductive load 6 A / 250 VAC. Power rating 2,5 VA, supply voltage 24 VAC +/- 20%	REN268A00	87,--
	3 x Two-State Relay Pack		
	1 Channel with Manual Override		
	Relay pack is connected to an analogue output (3,5; 6 o 8,5 VDC) of an universal controller. Manu-Auto, 0-1-2-3 facility and feedback terminal connectors. 2 LED's indicate the state of each relay. DIN rail mounting. 3 relay outputs: Inductive load 4A/250VAC. Power rating 1,4 VA, supply voltage 24 VAC +/- 20%	REN269A00	130,--
	Digital Input Multiplexer, Active		
	To monitor up to 4 digital contacts. The output voltage is set 0 ... 7,5 V according to state of input 1 (0,5 V), input 2 (1,0 V), input 3 (2,0 V) and input 4 (4,0 V). LED indication for each input. Operating voltage: 24 VAC / DC, DIN -rail mounted. - 4 digital-inputs - 1 analogue-output connected to an analogue input	REN224A00	74,--

		Type	Price in EUR
	Contact Sensor		
	Contact sensor for mounting on pipes. NTC-sensor, exchangeable 2-wire terminal cable length 4 m. Enclosure protection IP 67.	FTA101A00	21,--
	Tightening strap for contact sensor	ZB126A	3,--
	Immersion Sensors		
	Immersion depth 100 mm, NTC-sensor, exchangeable 2-wire terminal. Enclosure protection IP 54.	FTT102A00	55,--
	Immersion depth 150 mm, NTC-sensor, exchangeable 2-wire terminal. Enclosure protection IP 54.	FTT108A00	57,--
	Immersion depth 200 mm, NTC-sensor, exchangeable 2-wire terminal. Enclosure protection IP 54.	FTT109A00	56,--
	Protective Shafts for Immersion Sensors		
	Nickel-plated brass, PN 10 Immersion depth 100 mm.	SRMS100	27,--
	Stainless steel, PN 25 Immersion depth 100 mm	SRN100	32,--
	Nickel-plated brass, PN 10 Immersion depth 150 mm.	SRMS150	11,--
	Nickel-plated brass, PN 10 Immersion depth 200 mm.	SRMS200	34,--
	Stainless steel, PN 25 Immersion depth 200 mm	SRN200	38,--
	Nickel-plated brass, PN 10 Immersion depth 400 mm.	SRMS400	42,--
	Stainless steel, PN 25 Immersion depth 400 mm	SRN400	45,--
	Cable Sensor		
	Cable temperature sensor with a cast thermo cable, length 2 m, NTC-sensor, exchangeable 2-wire terminal. Enclosure protection IP 67. Max. Temperature 120°C.	FTT103A20	15,--
	Air-Temperature Sensor		
	Air-temperature sensor for duct mounting, NTC-sensor, exchangeable 2-wire terminal. Immersion depth 200 mm. Enclosure protection IP 54.	FTK119A00	53,--
	Air duct flange Ø6mm for duct temperature sensor FTK119A00	RMF006A	7,--
	Outdoor Air Sensor		
	Sensor for outdoor wall mounting. NTC-sensor, exchangeable 2-wire terminal. Enclosure protection IP 54.	FTW105B03	17,--
	Room-Temperature Sensor		
	Room-temperature sensor for wall mounting. NTC-sensor, white PVC housing, exchangeable 2-wire terminal. Enclosure protection IP 20.	FWR116D02	27,--

Type
Price
in EUR

Contact Sensor

Contact sensor for mounting on pipes. Pt1000-sensor, exchangeable 2-wire terminal cable length 4 m. Enclosure protection IP 67.

FTA301A00 22,--

Tightening strap for contact sensor

ZB126A 3,--

Immersion Sensors

Immersion depth 100 mm, Pt1000-sensor, exchangeable 2-wire terminal. Enclosure protection IP 54.

FTT302A00 58,--

Immersion depth 200 mm, Pt1000-sensor, exchangeable 2-wire terminal. Enclosure protection IP 54.

FTT309A00 60,--

Protective Shafts for Immersion Sensor

Nickel-plated brass, PN 10
Immersion depth 100 mm.

SRMS100 27,--

Stainless steel, PN 25
Immersion depth 100 mm

SRN100 32,--

Nickel-plated brass, PN 10
Immersion depth 200 mm.

SRMS200 31,--

Stainless steel, PN 25
Immersion depth 200 mm

SRN200 38,--

Nickel-plated brass, PN 10
Immersion depth 400 mm.

SRMS400 42,--

Stainless steel, PN 25
Immersion depth 400 mm

SRN400 45,--

Cable Sensors

Cable temperature sensor with a cast thermo cable, length 2 m, Pt1000-sensor, exchangeable 2-wire terminal. Enclosure protection IP 67. Max. Temperature 240°C.

FTT303A20 22,--

Identical to RFT303A20, except, thermo cable, length 5 m.

FTT303A50 31,--

Air-Temperature Sensor

Air-temperature sensor for duct mounting, Pt1000-sensor, exchangeable 2-wire terminal. Immersion depth 200 mm. Enclosure protection IP 54.

FTK319A00 56,--

Air duct flange Ø6mm for duct temperature sensor FTK319A00

RMF006A 7,--

Outdoor Air Sensor

Sensor for outdoor wall mounting. Pt1000-sensor, exchangeable 2-wire terminal. Enclosure protection IP 54.





FTW305B03 17,--

Room-Temperature Sensors

Room-temperature sensor for wall mounting. Pt1000 sensor, white PVC housing, exchangeable 2-wire terminal. Enclosure protection IP 20.

FWR316D02 30,--



		Type	Price in EUR
	Positioner		
	Active setpoint adjuster output 0 ... 10 VDC for panel mounting, setpoint 0...100 % for remote adjustment of dampers (for LM24A-SR, NM24A-SR, SM24A-SR and GM24A-SR).	SGF24	98,--
	Transducer		
	Dual Temperature and Humidity Sensor		
	Room-temperature/humidity probe for range of 0 ... 100 % relative humidity, corresponding to an output 0 ... 10 VDC and room-temperature probe 0 ... 50 °C corresponding to an output 0 ... 10 VDC. PVC housing for wall mounting. Supply voltage 24VAC. Enclosure protection IP 20.	FWH816D02	198,--
	Air-duct temperature/humidity sensor for range of 0 ... 100 % relative humidity, corresponding to an output 0 ... 10 VDC and room-temperature sensor -20 ... 80 °C corresponding to an output 0 ... 10 VDC. PVC housing for duct mounting, immersion depth 140 mm. Supply voltage 24VAC. Enclosure protection IP 65.	FTH802D02	264,--
	Outside Humidity sensor for relative humidity 0 ... 100% according to 0 ... 10VDC output and outside air temperature sensor -20 ... 80 °C according to 0 ... 10VDC output. Supply voltage 24 VDC/AC, protection class IP 65.	FTA54VV	343,--
	Air Quality Sensor		
	for measurement of gaseous mixture, VOC-sensor, wall mounting. Output 0 ... 10 VDC corresponding 0 ... 10 gaseous unit, supply voltage 24VAC. Enclosure protection IP 20.	RFQ100C02	277,--
	for measurement of gaseous mixture, VOC-sensor, for duct mounting, immersion depth 180 mm. Output 0 ... 10 VDC corresponding 0 ... 10 gaseous unit, supply voltage 24VAC. Enclosure protection IP 65.	RFQ101C02	329,--
	Air flow-temperature transmitter		
	The IVL is an air flow-temperature transmitter with a widespread application range, e.g. control, monitoring and regulation of the air flow speed and temperature in air ducts, immersion depth 50 ... 190 mm. Supply voltage 22 -28 VAC/DC. Output signal flow: 0 ... 10 VDC/4 ... 20 mA corresponding 0 ... 2 m/s.	**IVL 02	275,--
	As IVL 02, however 0 ... 10 m/s.	**IVL 10	258,--
	As IVL 02, however 0 ... 10 m/s, immersion depth 200 ... 400mm.	**IVL 10-400	287,--
	As IVL 02, however 0 ... 20 m/s	**IVL 20	280,--
	As IVL 02, however 0 ... 20 m/s, immersion depth 200 ... 400mm.	**IVL 20-400	295,--

** not a stock item

Type Price
in EUR

Hygrostats

Humidity add-on switch / dew point control switch to monitor the formation of condensed water. Range of operating 50 ... 95% rH, switching difference 4% rH, contact rating 2 A / 230 VAC, transfer contact, IP 20.

FAS 146,--

Room hygrostat for wall mounting. Measuring range 30...95% relative humidity. Maintenance-free plastic sensing element. Switching differential +/- 3% rH. Contact rating 2 A / 230 V, transfer contact. Enclosure protection IP 20.

HGM 99,--

Duct hygrostat for air-duct mounting. Measuring range 20% ... 100% rH. Maintenance-free hair-sensing element, ambient temperature 0°C ... 60°C. Switching differential 4% rH. Contact rating 15A / 230V, transfer contact, including mounting plate. max. immersion depth 100 mm, IP 54.

HG80 255,--

Differential Pressure Switch

Differential pressure switch for wall mounting. VDE/DVGW tested. Range of adjustment 20 ... 300 Pa, switching differential ≤ 10 Pa. Max. Excess pressure 5 kPa. Tubing connection 6mm. Contact rating 250 V / 1 A. Transfer contact. Including 2 duct-mounting flanges and 2 m of PVC house. IP 54 with cap.

DS604.03 41,--

As DS604.03, however **pressure range adjustment 50 ... 500 Pa.** switching differential ≤ 30 Pa. Max.

DS604.05 41,--

As DS604.03, however **pressure range adjustment 0,1 ... 1,0 kPa.** switching differential ≤ 30 Pa. Max. Excess pressure 5 kPa.

DS604.10 41,--

Differential Pressure Transmitter

Differential pressure transmitter for measures pressure or differential pressure, 24 VAC supply voltage provides a 0 ... 10 VDC output signal, measuring range selectable by jumper, (other outputs can be delivered); suitable for air or neutral gases; port connections are suitable for 6 mm hose connection, IP 54 with cover.

Measuring range		
0 ... 0,1 / 0 ... 0,3 / 0 ... 0,5 kPa	DT699.05	238,--
0 ... 0,3 / 0 ... 0,5 / 0 ... 1,0 kPa	DT699.10	238,--
0 ... 1,0 / 0 ... 1,6 / 0 ... 2,5 kPa	DT699.25	238,--

Relative Pressure Transmitter

Relative pressure transmitter for liquids and neutral gases with external thread G1/4". Including connector socket, Supply voltage 16,2 ... 33VDC, short circuit protected output signal 0 ... 10VDC, IP 65.

Measuring range		
-100 ... 0 kPa	**DT501.000	109,--
0 ... 1000 kPa	**DT501.100	109,--
0 ... 2500 kPa	**DT501.250	109,--

Differential Pressure Transmitter

Relative pressure transmitter for liquids and neutral gases with screw fitting Ø6mm. Including connector socket, Supply voltage 18 ... 33VDC / 24VAC short circuit protected output signal 0 ... 10VDC, IP 65.

Measuring range		
0 ... 50 kPa	**DT692.005	511,--
0 ... 100 kPa	**DT692.010	511,--
0 ... 250 kPa	**DT692.025	511,--
0 ... 400 kPa	**DT692.040	511,--
0 ... 600 kPa	**DT692.060	511,--
0 ... 1000 kPa	**DT692.100	511,--

** not a stock item





Heating controller for boiler, mixer circuit and domestic hot water charge.

Weather-compensated heating controller in wall-mounted housing with external operating unit.

The operating unit can be mounted in the living room. The controller controls one boiler and is ideally suited for the control of a mixed heating circuit and domestic hot water preparation. The time programs for the heating circuit and hot water preparation as well as all necessary operating data of the heating system can be programmed via the operating unit. Supply voltage 230 VAC.

Operation is divided into levels with programmable access locks.

- Boiler control 1-stage with ON-OFF output for burner control
- Mixer circuit control Tri-sate
- Domestic hot water control with sensor

Consisting of:

- Central device VS5500
- Room remote control SR5811 with integrated room sensor
- Weather sensor
- Flow contact sensor
- Tensioning strap ZB126A
- 2 x immersion sensors with 2,5m silicone cable for boiler and hot water

Type	Price in EUR
VS5500 Set	650,--

Universal system controller with integrated heat management for step and modulating heat generators, with buffer storage function, solar and solid fuel integration.



Thanks to a large number of inputs and outputs, these controllers can be used universally for the control and regulation of heating systems with several heating circuits under the following conditions

integration of e.g. oil, gas or pellet boilers with or without protection functions, heat pumps, systems with or without buffer storage and solar. The heat generator can be controlled in single-stage, two-stage or modulating mode.

The heat management system determines the heat demand of all consumers and determines the required heat output, taking into account any available solar energy and buffer storage arrangement. Via the cascade function, this demand can be distributed to up to 8 heat generators, which can be controlled stepwise via slave controllers and modulating via eBus-Opentherm Gateway. A maximum of 7 additional heating circuit controllers, each with 2 heating and one hot water circuit, can be connected to the master controller via the eBUS.

Predefined hydraulic applications are stored in each unit. During commissioning, only the appropriate hydraulic application must be selected. This usually eliminates the need for individual adjustment of each parameter and makes commissioning easier.

The generous terminal compartment enables simple wiring without additional support terminals.

Operation is via the master operating unit. The master control unit is the central control unit with which all the individual functions in the units can be operated and set.

A remote control can be connected for each heating circuit. An extensive range of accessories such as, sensor, remote control with room sensor, eBus-Opentherm-Gateway is available.

Consisting of:

- Central device SE6324 OGZ A10
- Room remote control MB6102 with integrated room sensor
- 2 x flow sensors with 2m cable ZVF210
- 2 x immersion sensors with 2.5m PVC cable ZTF222.2
- 1 x Immersion sensor with 1.5m silicone cable ZTF223.1
- 1 x Outdoor sensor ZAF500

SE6324OGZA10 1	296,--
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Solar storage tank charge controller

The ES 6522 solar controller is a wall-mounted controller for controlling solar thermal systems for domestic hot water preparation and auxiliary heating, as well as for the application of temperature difference controls with pre-programmed hydraulic variants.

The backlit graphic display shows the system states in animated form as well as the most important temperatures in the basic display and parameters and set point/actual values in plain text. Pre-programmed basic hydraulic variants can be expanded with additional functions. The clear operating concept guarantees easy handling even with very large systems in the selected language. The solar yield calculation, optionally with recording of the volume flow via volume pulse generator, calculates and displays the current output, the partial yield in kWh, as well as the total yield in MWh, and displays it graphically in the statistics. When using volume measuring devices, the controller always regulates the system to the optimum volume flow depending on the supply of sunlight within the stored minimum and maximum limits. The internal data log on an SD card creates a complete history of all actual and status values, changes and information.

Set consisting of:

- Central device ES6522SZ
- 2 collector sensors with 1,5 m silicone cable ZTF 223.1
- 4 storage sensors with 1,5 m PVC cable ZTF 222

Type	Price in EUR
ES6522SZ Set	545,--



Remote monitoring

The unit is used for remote system monitoring.

The RC7020 allows access to the data of the connected TEM controllers via PC and internet browser: Commissioning and maintenance, as well as data recording, viewing and changing controller data.

RC7020	505,--
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Type Price
in EUR**Heating- and distance heating controller for boiler-, 2x-mixing- and domestic hot water circuit**

Outside air temperature and/or room temperature dependent heating control with 4 control loops:

- Boiler control 1- or 2 stages with ON-OFF or modulating output for burner control
 - 2x Mixing circuits ON-OFF or tri-state control, boiler protection possible
 - Domestic hot water control (Thermostat or sensor)
- 12 channel digital time switch for day-/night- weekly schedule, holiday schedule, 7 heating programmes, 24h running reserve, LCD Display for monitoring of operating status, temperatures, operation hours, self adaptive heating curve, self learning optimiser. Undetachable device parameters. "Help function". RS232 Interface for data transmission, direct or via modem. Demand depending pump control, heat limit automatic. With domestic hot water priority mode, loading pump delay, Protective insulation class II according to EN60730. Plastic housing for panel door mounting or wall mounting. Front dimension 144 x 96 mm, depth with base plate 101 mm. Controller pluggable. Enclosure protection IP40. Power supply 230 VAC.

Options:

- Max. 5 Mixing circuit controller RZM510A004 connectable (For boiler cascade max. 6 Mixing circuits possible)
- Max. 3 Hot water controller RZM515A004 connectable
- Max. 3 Boiler sequence controller RZM530A004 connectable
- Max. 7 Room controller RFT/B510/520 connectable
- Max. 15 Devices connectable to D-Bus

Communication ability with Bus-Interface RZB565A000
Connection to Controlesta RCO (Modbus) with Bus-Interface RZB568A000

Consisting of:

- Central device DOMOTESTA RDO383A110 (without base plate and connector for 2. mixing circuits)

RDO383A110 1 030,--

**Additional Modules****Mixing circuit controller (Slave) for RDO383A110**

Weather dependent controller for 1 mixing circuit, addressable and connectable to device bus (D-Bus), adaptive heating curve adjustment with self learning Start-Stop optimiser. Switching times, general settings via the Main controller. Summer-Winter-changeover. Room controller assignable via D-bus.

- Additional module DOMOTESTA RZM510A114 (without base plate)

RZM510A114 360,--

**Domestic Hot water controller (Slave) for RDO383A110**

Hot water controller for the control of an additional hot water loading. Addressing and connection via device bus (D-Bus). The Module is able to control 1 hot water pump and electro heater or 2 mixing valves.

- Additional module DOMOTESTA RZM515A004 (without base plate)

RZM515A004 380,--

**Boiler sequence controller (Slave) for RDO383A110 for boiler cascades**

Boiler control with 1 stage, 2 stages or modulating burner (oil, gas), Boiler protection via mixing valve or shut-off valve, addressable and connectable to device bus (D-Bus). General settings, boiler sequence module via the Main controller parametrisable.

- Additional module DOMOTESTA RZM530A114 (without base plate)

RZM530A114 410,--



Type Price
in EUR

USB-Interface cable incl. CD

For the System-Software ECom. (The software can be downloaded free of charge from our Homepage "www.elesta.de").

RZB010B 201,--



Terminal block

Edge connectors each with 15 screwing terminals suitable for the connection of max. 2 x 1,5 mm², black, for all DOMOTESTA RDO..., RZM... equipment.

RZB510A000 50,--



Edge connectors for **2. mixing circuit with** 5 screwing terminals, white, suitable for the connection of max. 2 x 1,5 mm², for DOMOTESTA RDO383A110.

RZB511A000 11,--



Base plate with edge connectors each with 15 screwing terminals, suitable for the connection of max. 2 x 1,5 mm², 4 support bases each with 3 screwing terminals, for e.g. Phase, Mp, GND, etc. for all DOMOTESTA RDO..., RZM... equipment.

RZB520A000 97,--



Extension for terminal compartment, pluggable to the top or bottom (than 2 pieces necessary) of the base plate RZB520A000. Cord grip through glands possible (not included in delivery). Dimensions 30 x 144 mm.

RZB521A000 19,--











I/O-Modul

I/O module for recording a maximum of 4 specific heat pump faults, with integrated relay for an additional output (for the controller's PWM output). Max. four 230VAC signals for the faults high pressure, low pressure, safety chain and primary fault. The pending fault is displayed in the controller. The disturbances are also processed in the RDO300 controller. For DOMOTESTA RDO300 dimensions 93 x 96 x 42mm.

RZB540A000 235,--



		Type	Price in EUR
	Contact Sensor Contact sensor for mounting on pipes. PTC-sensor, exchangeable 2-wire terminal, cable length 4 m. Enclosure protection IP 67.	FTA201A00	21,--
	Tightening strap for contact sensor	ZB126A	3,--
	Protective Shafts for Immersion Sensors Nickel-plated brass, PN 10 Immersion depth 100 mm.	SRMS100	27,--
	Stainless steel, PN 25 Immersion depth 100 mm	SRN100	32,--
	Nickel-plated brass, PN 10 Immersion depth 200 mm.	SRMS200	34,--
	Stainless steel, PN 25 Immersion depth 200 mm	SRN200	38,--
	Nickel-plated brass, PN 10 Immersion depth 400 mm.	SRMS400	42,--
	Stainless steel, PN 25 Immersion depth 400 mm	SRN400	45,--
	Cable Sensors Cable temperature sensor with a cast thermo cable, length 2,5 m, PTC-sensor, exchangeable 2-wire terminal. Enclosure protection IP 67. Max. Temperature 120°C.	FTT203A25	18,--
	Cable temperature sensor with a cast thermo cable, length 4 m, PTC-sensor, exchangeable 2-wire terminal. Enclosure protection IP 67. Max. Temperature 120°C.	FTT203A40	19,--
	Cable temperature sensor with a cast thermo cable, length 2 m, Pt1000-sensor, exchangeable 2-wire terminal. Enclosure protection IP 67. Max. Temperature 240°C.	FTT303A20	22,--
	Outdoor Air Sensor Sensor for outdoor wall mounting. NTC-sensor, exchangeable 2-wire terminal. Enclosure protection IP 54.	FTW105B03	17,--

		Type	Price in EUR
	Room-Temperature Sensor for RDO1/3...		
	Room-temperature sensor for wall mounting. NTC-sensor, white PVC housing, exchangeable 2-wire terminal. Enclosure protection IP 20.	FWR116D02	27,--
	Setpoint Adjuster for RDO1...		
	Setpoint adjuster for wall mounting with range +/- 3 K to adjust the setpoint, program switch for "normal, auto, reduced", integrated room temperature sensor, NTC-sensor, PVC housing. Enclosure protection IP 30.	RFB410A000	98,--
	Setpoint Adjuster for RDO2/3...		
	Setpoint adjuster for wall mounting with range +/- 3 K to adjust the setpoint, program switch for "normal, auto, reduced", integrated room temperature sensor, NTC-sensor, PVC housing. Enclosure protection IP 30.	RFB510A000	186,--
	Setpoint adjuster for wall mounting with range +/- 3 K to adjust the setpoint, program tracer for party-, save or permanently reduced function, indication of operating mode through LED, integrated room temperature sensor, NTC-sensor, PVC housing. Enclosure protection IP 30.	RFB520A000	198,--
	Comfort room remote control unit for RDO2/3...		
	Room remote control unit for wall mounting for the adjustment of the room temperature setpoint, operating mode and save or party function. Additionally holiday, time switch programs and setpoints can be changed. Furthermore setpoint, actual values and operating hours can be indicated.	**RFB540A000	350,--

** not a stock item



Damper Actuator 5 Nm (up to approx 1m²)

Damper actuator for Tri-state or 2 way-control, with switch to invert the direction of rotation, plug in unit for fitting directly on damper shaft, overload neutralizing, without end position switch, max. angle of rotation 95°, torque 5 Nm, travel time 150 sec. Supply voltage 230 VAC. Enclosure protection IP 54.

Type Price
in EUR

LM230A 157,--

As LM230A, however **with 1 additional auxiliary switch.**

**LM230A-S 186,--

As LM230A, however **with 24 VAC/DC supply voltage.**

LM24A 157,--

As LM230A, however **with 24 VAC/DC supply voltage 1 additional auxiliary switch.**

LM24A-S 186,--

As LM230A, however **analogue control 2 ... 10 VDC, 24 VAC supply voltage.**

LM24A-SR 211,--



Damper Actuator 10 Nm (up to approx 2m²)

Damper actuator for open-close- or 2 way-control, with switch to invert the direction of rotation, plug in unit for fitting directly on damper shaft, overload neutralizing, without end position switch, max. angle of rotation 95°, torque 10 Nm, travel time 150 sec. Supply voltage 230 VAC. Enclosure protection IP 54.

NM230A 197,--

As NM230A, however **with 1 additional auxiliary switch.**

**NM230A-S 230,--

As NM230A, however **with 24 VAC/DC supply voltage.**

NM24A 192,--

As NM230A, however **with 24 VAC/DC supply voltage 1 additional auxiliary switch.**

NM24A-S 223,--

As NM230A, however **analogue control 2 ... 10 VDC, 24 VAC supply voltage.**

NM24A-SR 274,--



Damper Actuator 20 Nm (up to approx 4m²)

Damper actuator for open-close- or 2 way-control, with switch to invert the direction of rotation, plug in unit for fitting directly on damper shaft, overload neutralizing, without end position switch, max. angle of rotation 95°, torque 20 Nm, travel time 150 sec. Supply voltage 230 VAC. Enclosure protection IP 54.

SM230A 216,--

As SM230A, however **with 1 additional auxiliary switch.**

SM230A-S 270,--

As SM230A, however **with 24 VAC/DC supply voltage.**

SM24A 222,--

As SM230A, however **with 24 VAC/DC supply voltage 1 additional auxiliary switch.**

SM24A-S 274,--

As SM230A, however **analogue control 2 ... 10 VDC, 24 VAC supply voltage.**

SM24A-SR 320,--



Damper Actuator 40 Nm (up to approx 8m²)

Damper actuator for open-close- or 2 way-control, with switch to invert the direction of rotation, plug in unit for fitting directly on damper shaft, overload neutralizing, without end position switch, max. angle of rotation 95°, torque 40 Nm, travel time 150 sec. Supply voltage 230 VAC. Enclosure protection IP 54.

GM230A 387,--

As GM230A, however **with 24 VAC/DC supply voltage.**

GM24A 371,--

As GM230A, however **analogue control 2 ... 10 VDC, 24 VAC supply voltage.**

GM24A-SR 461,--

** not a stock item



Spring-Return Actuators 10 Nm

Rotation direction reversible, spring return active in case of power failure only. Plug in unit for fitting directly on damper shaft, overload neutralizing, without end position switch, max. angle of rotation 95°, torque for actuator and spring-return 10 Nm, travel time for motor ≤75 sec., travel time for spring return ≤20 sec. Supply voltage 24 ... 230 VAC / 24 ... 125 VDC. Enclosure protection IP 54.

Type Price
in EUR

**NFA 350,--

As NFA, however with **2 auxiliary switch** 1 x fix 10%, 1 x adjus. 10...90°

**NFA-S2 396,--

Spring-return actuator for continuous damper-position control, for dampers with safety function, built-in position controller, Integrated angle of rotation limitation, spring return active in case of power failure only, plug-in unit for fitting directly on damper shaft, max. angle of rotation 95°, torque actuator and spring-return 10 Nm min., travel time for motor ≤150 sec. travel time for spring return ≤20 sec. Control voltage 2 ... 10 VDC and position feedback. Supply voltage 24 VAC/DC. Enclosure protection IP 42.

**NF24A-SR 356,--



Spring-Return Actuators 20 Nm

Rotation direction reversible, spring return active in case of power failure only. Plug in unit for fitting directly on damper shaft, overload neutralizing, without end position switch, max. angle of rotation 95°, torque for actuator and spring-return 20 Nm, travel time for motor ≤75 sec., travel time for spring return ≤20 sec. Supply voltage 24 ... 240 VAC / 24 ... 125 VDC. Enclosure protection IP 54.

**SFA 417,--

As SF230A, however with **2 auxiliary switch** 1 x fix 10%, 1 x adjus. 10...90°

**SFA-S2 453,--

Spring-return actuator for continuous damper-position control, for dampers with safety function, built-in position controller, Integrated angle of rotation limitation, spring return active in case of power failure only, plug-in unit for fitting directly on damper shaft, max. angle of rotation 95°, torque actuator and spring-return 20 Nm min., travel time for motor ≤150 sec. travel time for spring return ≤20 sec. Control voltage 2 ... 10 VDC and position feedback. Supply voltage 24 VAC/DC. Enclosure protection IP 42.

**SF24A-SR 420,--



Auxiliary Switch

2 auxiliary switches 0,5 A / 250 VAC for dampers LM...A, NM...A, SM...A a. GM...A

S2A 97,--

2 auxiliary switches 0,5 A / 250 VAC for dampers NF...A, and LF...A

S2A-F 143,--

Feedback potentiometer 1000 ohm for dampers LM...A, NM...A a. SM...A

P1000A 108,--



Universal Extension

Length approx 250 mm. For 8 ... 25 mm damper shafts suitably for dampers NM...A and SM...A, NF...A and SF...A

**AV8-25 52,--

** not a stock item



Actuator tri-state for Mixing Valves, 15 Nm

Reversible rotary actuator to drive mixing valves. Drive motor for 230 VAC. Max. angle of rotation 90°, torque 15 Nm. Position limitation switch, travel time 140 sec., plastic housing, manual control, position indication.

As NR230-20B, however **with 24 VAC supply voltage.**

As NR230-20B, however **for 24 VAC supply voltage and analogue control 0 ... 10 VDC and position feed back 0 ... 10 VDC.**

Type	Price in EUR
NR230-20B	215,--
NR24-20B	215,--
NR24-SR-T	329,--

Add-On Kit for Third Party Mixing Valves

ELESTA	(Type H3/4G, H3/4MG, H3/4F)	MS-NRE	17,--
ELESTA	(Type VRG131, VRG141...)	MS-NRE6	17,--
CENTRA	(Type ZR..., DR...)	MS-NRC	34,--
LANDIS & STAЕFA	(Series 2) VCI 31 DN 20 ... 40 VBG 31 DN 20 ... 40 VBF 21 DN 40 ... 50	**MS-NRL	24,--
LANDIS & STAЕFA	(Series 1) B3F... DN 20 ... 40 B3G... DN 20 ... 40	**MS-NRL1	56,--
Holter ELESTA	BR80 SMD/SMV Type: H3/4S	MS-NRH	19,--

End position-switch

2 end position switches, normally open 5 (1) A / 250 VAC for NR230-20B and NR24-20B

SNR-2NO	65,--
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3-Way Mixing Valves

3-way mixing from brass DZR for PN10, with threaded pipe connection. Internal brass components, maintenance-free O-ring seal, leakage <1,0%. Compact design for left- or right-hand mounting, max. Operating temperature 110°-130°C

Max. Δpv	As mixing valve: 100 kPa	As diverting valve: 200 kPa	k _v , m³/h	DN		
			2,5	1/2"	VRG131	125,--
			4,0	1/2"	VRG131	125,--
			6,3	3/4"	VRG131	125,--
			10,0	1"	VRG131	129,--
			16,0	1 1/4"	VRG131	142,--
			25,0	1 1/2"	VRG131	221,--
			40,0	2"	VRG131	305,--



3-way valve according DIN 2531, made of GG 20 for PN 6, for flange mounting connection. Internal brass components, stainless-steel shaft, maintenance-free O-ring seal. Compact design for left- or right-hand mounting, max. operating temperature 110°C.

Max. Δpv	As mixing valve: 30 kPa	As diverting valve: 30 kPa				
			12	20	H3F120	326,--
			18	25	H3F125	330,--
			28	32	H3F132	368,--
			44	40	H3F140	397,--
			60	50	H3F150	504,--
			90	65	H3F165	583,--
			150	80	H3F180	810,--
			225	100	**H3F1100	1 025,--

4-Way Mixing Valves

4-way mixing from brass DZR for PN10, with threaded pipe connection. Internal brass components, maintenance-free O-ring seal, leakage <1,0%. Compact design for left- or right-hand mounting, max. Operating temperature 110°-130°C

Max. Δpv	100 kPa					
		6,3	3/4"	**VRG141	135,--	
		10,0	1"	**VRG141	145,--	
		16,0	1 1/4"	**VRG141	163,--	
		25,0	1 1/2"	**VRG141	300,--	
		40,0	2"	**VRG141	347,--	



4-way valve according DIN 2531, made of GG 20 for PN 6, for flange mounting connection. Internal brass components, stainless-steel shaft, maintenance-free O-ring seal. Compact design for left- or right-hand mounting, max. operating temperature 110°C.

Max. Δpv	30 kPa					
		44	40	**H4F440	583,--	
		60	50	**H4F450	757,--	
		90	65	**H4F465	842,--	
		150	80	**H4F480	1 010,--	
		225	100	**H4F4100	1 388,--	



** not a stock item



Butterfly Valves, (tightly sealing) GJS 400

Ring butterfly valve for mounting between 2 flanges. Housing of GJS 400, PN 16, service free stuffing-box sealing of O-ring-packing, stem of stainless-steel, leakage air-blow-dense, max. temperature 135°C, including mounting kit.

DDF122BO00

Type Price
in EUR



Multi-turn actuator

Reversible rotary actuator (tri-state) to drive butterfly valves. Drive motor for 230 VAC. max. angle of rotation 90°, torque 15 Nm. Position limitation switch, travel time 140 sec., plastic housing, manual control, position indication.

NR230-20B 215,--

As NR230-20B, however **with 24 VAC supply voltage.**

NR24-20B 215,--

As NR230-20B, however **for 24 VAC supply voltage and analogue control 0 ... 10 VDC and position feed back 0 ... 10 VDC.**

NR24-SR-T 329,--



Reversible rotary actuator for 2 and 3 point control, overload neutralizing and without end position switch, with switch to invert the direction of rotation, torque 40 Nm, travel time ca. 150 sec. Supply voltage 230 VAC. Enclosure protection IP 54.

GR230A 523,--

As GR230A, however **with 24 VAC or 24 VDC supply voltage.**

GR24A 523,--

As GR230A, however **with 24 VAC or 24 VDC supply voltage, and analogue control 2 ... 10 VDC.**

GR24A-SR 618,--

NR230-20B NR24-20B NR24-SR-T	GR230A GR24A GR24A-SR				
Δp_0 kPa	Δp_0 kPa	k_{vs} m ³ /h	DN		
1000	1400	116	40		297,--
1000	1400	116	50		305,--
600	1200	257	65		321,--
600	1200	508	80		341,--
600	1200	925	100		362,--
--	600	1492	125		430,--
--	600	2168	150		480,--

**Bigger Butterfly
Valves on request**

Accessories

2 end position normally open 5 (1) A / 250 VAC for NR230-20B and NR24-20B

SNR-2NO 65,--

2 auxiliary switches 0,5 A / 250 VAC for rotary actuators GR..A

S2A 97,--



** not a stock item

Multi-turn actuator and butterfly valves are delivered completely mounted



Zone 2-way valves, Red Brass, PN 10

2-way valves of red brass, for PN 10, with thread connection and screw caps, service free stuffing-box sealing, stem of stainless steel. Max. operating temperature 120°C, Low-pressure-steam 110°C / 0,5 bar, equal-percentage characteristics.

ADG111A000

Type Price
in EUR



Zone 3-way reversing valves, Red Brass, PN 10

3-way valves of red brass, for PN 10, with thread connection and screw caps, service free stuffing-box sealing, stem of stainless steel. Max. operating temperature 120°C, Low-pressure-steam 110°C / 0,5 bar, equal-percentage characteristics.

ADG211A000



Thermal 2-way Actuator, 230 VAC

230 VAC with 1 m connecting cable, for 2-way drive or Puls-break, closing and opening time approx. 3,5 min., power rating 1 W, actuator force 100 N, stroke 4 mm, with adapter for ADG-valves.

A20405 27,--



Thermal 2-way Actuator, 24 VAC/DC

24 VAC/DC with 1 m connecting cable, for 2-way drive or Puls-break, closing and opening time approx. 3,5 min, power rating 1 W, actuator force 100 N, stroke 4 mm, with adapter for ADG-valves.

A40405 27,--



Thermal 2-way Actuator, 230 VAC

230 VAC with 1 m plug-in connecting cable, for 2-way drive or Puls-break, closing and opening time approx. 3,5 min., power rating 1 W, actuator force 100 N, stroke 4 mm, with adapter for ADG-valves.

AST20405 28,--



Thermal 2-way Actuator, 24 VAC/DC

24 VAC/DC with 1 m plug-in connecting cable, for 2-way drive or Puls-break, closing and opening time approx. 3,5 min, power rating 1 W, actuator force 100 N, stroke 4 mm, with adapter for ADG-valves.

AST40405 28,--



Analogue control 0 ... 10 VDC, 24 VAC

Analogue control 0 ... 10 VDC, 24 VAC with 1 m plug-in connecting cable, position indicator, power rating 1 W, actuator force 100 N, stroke 4 mm, with adapter for ADG-valves.

APR40405 71,--

On request:

- Longer connection cables
- Auxiliary switch
- NO
- Adapter for other valves

2-way valves

Stroke mm (app.)

	A20405	A40405	AST20405	AST40405	APR40405	Δp_0 kPa	k_{vs} m³/h	DN	
2						350	1,25	3/8"	35,--
2						350	1,35	1/2"	36,--
2						350	2,5	3/4"	48,--
2						160	4,2	1"	76,--
2						100	5,8	1 1/4"	117,--

3-way valves

Stroke mm (app.)

	A20405	A40405	AST20405	AST40405	APR40405	Δp_0 kPa	k_{vs} m³/h	DN	
2						350	0,63	1/2"	149,--
2						350	2,5	1/2"	146,--
2						350	3,5	3/4"	176,--
2						160	5,1	1"	227,--

Protective Cover

for A20405, A40405, AST20405, AST40405 and APR40405

ASK1004 52,--





3-way characterized control valve

Characterized ball valve made from nickel-plated brass for open and closed cold and warm water systems, compact design, Internal thread, leakage rate Air bubble-tight in path A-AB, in Bypass B-AB <2% of kvs-value, Operating temperature -10 ... 120°C.

Type	Price in EUR
see below	

Rotary actuator, 2Nm

Rotary actuator for ON-OFF and tri-state operation, supply voltage 230VAC, 1m cable, running time 105 sec./90°, torque 2Nm, protection class IP40.

As TR230-2, however supply voltage 24 VAC/DC, running time 100 sec.

As TR230-2, however modulating control signal 2 ... 10 VDC, supply voltage 24 VAC/DC, running time 90 sec.

**TR230-3	157,--
**TR24	166,--
**TR24-SR	199,--

Rotary actuator, 5Nm

Rotary actuator for ON-OFF and tri-state operation, supply voltage 230 VAC, 1 m cable, running time 90 sec./90°, torque 5 Nm, protection class IP54.

As LR230A, however supply voltage 24 VAC/DC.

As LR230A, however modulating control signal 2 ... 10 VDC, position indication, supply voltage 24 VAC/DC.

**LR230A	190,--
**LR24A	190,--
**LR24A-SR	248,--

Rotary actuator, 10Nm

Rotary actuator for ON-OFF and tri-state operation, supply voltage 230 VAC, 1 m cable, Running time 90 sec./90°, torque 10 Nm, protection class IP54.

As NR230A, however supply voltage 24 VAC/DC.

As NR230A, however modulating control signal 2 ... 10 VDC, position indication, supply voltage 24 VAC/DC.

**NR230A	236,--
**NR24A	236,--
**NR24A-SR	331,--

Rotary actuator, 20Nm

Rotary actuator for ON-OFF and tri-state operation, supply voltage 230 VAC, 1 m cable, Running time 90 sec./90°, torque 20 Nm, protection class IP54.

As NR230A, however supply voltage 24 VAC/DC.

As NR230A, however modulating control signal 2 ... 10 VDC, position indication, supply voltage 24 VAC/DC.

**SR230A	267,--
**SR24A	267,--
**SR24A-SR	361,--

TR230-3 TR24 TR24-SR	LR230A LR24A LR24A-SR	NR230A NR24A NR24A-SR	SR230A SR24A SR24A-SR	RP	k _{vs} m ³ /h	DN		
Δp _{max} kPa	Δp _{max} kPa	Δp _{max} kPa	Δp _{max} kPa					
350	350	350	350	1/2"	0,25	15	**R3015-P25-S1	162,--
350	350	350	350	1/2"	0,4	15	**R3015-P4-S1	162,--
350	350	350	350	1/2"	0,63	15	**R3015-P63-S1	162,--
350	350	350	350	1/2"	1,0	15	**R3015-1-S1	162,--
350	350	350	350	1/2"	1,6	15	**R3015-1P6-S1	162,--
350	350	350	350	1/2"	2,5	15	**R3015-2P5-S1	162,--
350	350	350	350	1/2"	4,0	15	**R3015-4-S1	162,--
---	350	350	350	3/4"	4,0	20	**R3020-4-S2	181,--
---	350	350	350	3/4"	6,3	20	**R3020-6P3-S2	181,--
---	350	350	350	1"	6,3	25	**R3025-6P3-S2	226,--
---	350	350	350	1"	10	25	**R3025-10-S2	226,--
---	---	350	350	1 1/4"	16	32	**R3032-16-S3	316,--
---	---	350	350	1 1/2"	16	40	**R3040-16-S3	389,--
---	---	350	350	1 1/2"	25	40	**R3040-25-S4	442,--
---	---	---	350	2"	25	50	**R3050-25-S4	453,--
---	---	---	350	2"	40	50	**R3050-40-S4	644,--
---	---	---	350	2"	58	50	**R3050-58-S4	735,--

Accessories
page 37

** not a stock item



2-way characterized control valve

Characterized ball valve made from nickel-plated brass for open and closed cold and warm water systems, compact design, Internal thread, leakage rate Air bubble-tight, Operating temperature -10 ... 120°C.

Type Price
in EUR

see below



Rotary actuator, 2Nm

Rotary actuator for ON-OFF and tri-state operation, supply voltage 230VAC, 1m cable, running time 105 sec./90°, torque 2Nm, protection class IP40.

**TR230-3 157,--

As TR230-2, however supply voltage 24 VAC/DC, running time 100 sec.

**TR24 166,--

As TR230-2, however modulating control signal 2 ... 10 VDC, supply voltage 24 VAC/DC, running time 90 sec.

**TR24-SR 199,--



Rotary actuator, 5Nm

Rotary actuator for ON-OFF and tri-state operation, supply voltage 230 VAC, 1 m cable, running time 90 sec./90°, torque 5 Nm, protection class IP54.

**LR230A 190,--

As LR230A, however supply voltage 24 VAC/DC.

**LR24A 190,--

As LR230A, however modulating control signal 2 ... 10 VDC, position indication, supply voltage 24 VAC/DC.

**LR24A-SR 248,--



Rotary actuator, 10Nm

Rotary actuator for ON-OFF and tri-state operation, supply voltage 230 VAC, 1 m cable, Running time 90 sec./90°, torque 10 Nm, protection class IP54.

**NR230A 236,--

As NR230A, however supply voltage 24 VAC/DC.

**NR24A 236,--

As NR230A, however modulating control signal 2 ... 10 VDC, position indication, supply voltage 24 VAC/DC.

**NR24A-SR 331,--



Rotary actuator, 20Nm

Rotary actuator for ON-OFF and tri-state operation, supply voltage 230 VAC, 1 m cable, Running time 90 sec./90°, torque 20 Nm, protection class IP54.

**SR230A 267,--

As NR230A, however supply voltage 24 VAC/DC.

**SR24A 267,--

As NR230A, however modulating control signal 2 ... 10 VDC, position indication, supply voltage 24 VAC/DC.

**SR24A-SR 361,--

TR230-3 TR24 TR24-SR	LR230A LR24A LR24A-SR	NR230A NR24A NR24A-SR	SR230A SR24A SR24A-SR	RP	k _v m ³ /h	DN		
Δp _{max} kPa	Δp _{max} kPa	Δp _{max} kPa	Δp _{max} kPa					
350	350	350	350	1/2"	0,25	15	**R2015-P25-S1	99,--
350	350	350	350	1/2"	0,4	15	**R2015-P4-S1	99,--
350	350	350	350	1/2"	0,63	15	**R2015-P63-S1	99,--
350	350	350	350	1/2"	1,0	15	**R2015-1-S1	99,--
350	350	350	350	1/2"	1,6	15	**R2015-1P6-S1	99,--
350	350	350	350	1/2"	2,5	15	**R2015-2P5-S1	99,--
350	350	350	350	1/2"	4,0	15	**R2015-4-S1	99,--
350	350	350	350	1/2"	6,3	15	**R2015-6P3-S1	99,--
---	350	350	350	3/4"	4,0	20	**R2020-4-S2	111,--
---	350	350	350	3/4"	6,3	20	**R2020-6P3-S2	111,--
---	350	350	350	3/4"	8,6	20	**R2020-8P6-S2	111,--
---	350	350	350	1"	6,3	25	**R2025-6P3-S2	133,--
---	350	350	350	1"	10	25	**R2025-10-S2	133,--
---	350	350	350	1"	16	25	**R2025-16-S2	133,--
---	---	350	350	1 1/4"	16	32	**R2032-16-S3	186,--
---	---	350	350	1 1/2"	16	40	**R2040-16-S3	224,--
---	---	350	350	1 1/2"	25	40	**R2040-25-S3	224,--
---	---	---	350	2"	25	50	**R2050-25-S4	294,--
---	---	---	350	2"	40	50	**R2050-40-S4	294,--

Accessories page 37

** not a stock item

Type Price
in EUR



3-way characterized control valve

Characterized ball valve made from nickel-plated brass for open and closed cold and warm water systems, compact design, Internal thread, leakage rate Air bubble-tight in A-AB, in B-AB <2% of kvs-value, Op. temp. -10 ... 120°C.

Prices see page 35

2-way characterized control valve

Characterized ball valve made from nickel-plated brass for open and closed cold and warm water systems, compact design, Internal thread, leakage rate Air bubble-tight, Operating temperature 110°C.

Prices see page 36

Rotary actuator spring return, 24VAC/DC

Rotary actuator with emergency control function for ON-OFF and tri-state operation (A-AB powerless closed), switch to invert, supply voltage 24 VAC/DC, 1m cable, running time 90 sec./90°, spring return <25 sec. at -20 ... 50°C, torque 2Nm, protection class IP42.

**TRF24-2(-O) 333,--

As TRF24-2, however modulating control signal 2 ... 10 VDC, position indication, supply voltage 24 VAC/DC.

**TRF24-SR(-O) 346,--

Rotary actuator, spring return, 2 ... 10VDC, 24 V

Rotary actuator with emergency control function for modulating operation (A-AB powerless closed), position indication, supply voltage 24 VAC/DC, 1 m cable, running time 150 sec./95°, spring return <20 sec. at -20 ... 50°C, torque 4 Nm, Protection class IP54.

**LRF24-SR(-O) 397,--

Rotary actuator, spring return, 2 ... 10VDC, 24 V

Rotary actuator with emergency control function for modulating operation (A-AB powerless closed), position indication, supply voltage 24 VAC/DC, 1 m cable, running time 90 sec./95°, spring return <20 sec. at -20 ... 50°C, torque 20 Nm, Protection class IP54.

**SRF24A-SR(-O) 525,--



-O spring return
B-AB closed.

TRF24-2 TRF24-2-O TRF24-SR TRF24-SR-O	LRF24-SR LRF24-SR-O	SRF24A-SR SRF24A-SR-O	Δp _{max} kPa	Δp _{max} kPa	Δp _{max} kPa	RP	k _{vs} m ³ /h	DN		
350	350	350	1/2"	0,25	15				**R3015-P25-S1	**R2015-P25-S1
350	350	350	1/2"	0,4	15				**R3015-P4-S1	**R2015-P4-S1
350	350	350	1/2"	0,63	15				**R3015-P63-S1	**R2015-P63-S1
350	350	350	1/2"	1,0	15				**R3015-1-S1	**R2015-1-S1
350	350	350	1/2"	1,6	15				**R3015-1P6-S1	**R2015-1P6-S1
350	350	350	1/2"	2,5	15				**R3015-2P5-S1	**R2015-2P5-S1
350	350	350	1/2"	4,0	15				**R3015-4-S1	**R2015-4-S1
350	350	350	1/2"	6,3	15					**R2015-6P3-S1
---	350	350	3/4"	4,0	20				**R3020-4-S2	**R2020-4-S2
---	350	350	3/4"	6,3	20				**R3020-6P3-S2	**R2020-6P3-S2
---	350	350	3/4"	8,6	20					**R2020-8P6-S2
---	350	350	1"	6,3	25				**R3025-6P3-S2	**R2025-6P3-S2
---	350	350	1"	10	25				**R3025-10-S2	**R2025-10-S2
---	350	350	1"	16	25					**R2025-16-S2
---	---	350	1 1/4"	16	32				**R3032-16-S3	**R2032-16-S3
---	---	350	1 1/2"	16	40				**R3040-16-S3	**R2040-16-S3
---	---	350	1 1/2"	25	40				**R3040-25-S4	**R2040-25-S3
---	---	350	2"	25	50				**R3050-25-S4	**R2050-25-S4
---	---	350	2"	40	50				**R3050-40-S4	**R2050-40-S4
---	---	350	2"	58	50				**R3050-58-S4	

Accessories

Auxiliary, Feedback Potentiometer

2 auxiliary switches 0,5 A / 250 VAC for dampers LR...A, NR...A and SR...A

S2A 97,--

Feedback potentiometer 1000 ohm for dampers LR...A, NR... and SR...A

P1000A 108,--



Pipe Fittings

Pipe fittings from malleable cast iron consisting of:

1x union end flate seat, 1x gland nut, 1x insert and 1x flat gasket

Size:	RP	1/2"	**ZR2315	16,--
	RP	3/4"	**ZR2320	17,--
	RP	1"	**ZR2325	20,--
	RP	1 1/4"	**ZR2332	30,--
	RP	1 1/2"	**ZR2340	37,--
	RP	2"	**ZR2350	56,--



** not a stock item



3-Way Valve, Cast-Iron, PN 6 (DN 15 ... 100)

3-way valve of cast-iron EN-JL 1040 (GG25) according to DIN EN 1561, flange connection PN 6, service free O-ring stuffing-box sealing from EPDM, leakage rate <0,1% of the kvs-value, plug and stem of stainless steel. Stem for quick-connection. Max. operating temperature 130°C, linear characteristics, used as mixing or distribution valve.

Type Price
in EUR

BKF202A000



Linear Actuator Tri-State, 230 VAC

Reversible actuator for 230 VAC, with end position switch, flange 30 mm, travel speed 8 mm/min, enclosure protection IP 43, actuator force 600 N.

AHS106A22 380,--

As AHS106A22, however actuator force **1000 N**.

AHS110A22 457,--

As AHS106A22, however actuator force **1500 N**.

AHS015A22 785,--

As AHS106A22, however travel speed 13,2 mm/min, IP 54, act. force **2000 N**.

AHS020A62 1 130,--

As AHS106A22, however travel speed 25 mm/min, IP 65, act. force **4100 N**.

AHS041A42 1 810,--



Linear Actuator 0 ... 10 VDC / Tri-State, 24VAC

Microprocessor controlled actuator for 24 VAC and analogue control 0...10 VDC or tri-state, position feed back 0 ... 10 VDC, with end position switch, flange 30 mm, travel speed 8 mm/min, enclosure protection IP 43, actuator force 600 N.

AHS106A24Y 420,--

As AHS106A24Y, however actuator force **1000 N**.

AHS110A24Y 495,--

As AHS106A24Y, however travel speed 10 mm/min, actuator force **1500 N**.

AHS015A24Y 915,--

As AHS106A24Y, however travel speed 13,2 mm/min, IP 54, act. force 2000 N.

AHS020F64Y 1 350,--

As AHS106A24Y, however travel speed 25 mm/min, IP 65, act. force **4100 N**.

AHS041F44Y 2 555,--



Linear Actuator Tri-State, 24 VAC

Reversible actuator for 24 VAC, with end position switch, flange 30 mm, travel speed 13,2 mm/min, enclosure protection IP 54, actuator force 2000 N.

AHS020A64 1 230,--

As AHS020A64, however travel speed 25 mm/min, IP 65, act. force **4100 N**.

AHS041A44 2 180,--



Linear actuator Type

3-way valves

Stroke mm	AHS106A22 AHS106A24Y	AHS110A22 AHS110A24Y	AHS015A22 AHS015A24Y	AHS020A62 AHS020F64Y AHS020A64	AHS041A42 AHS041F44Y AHS041A44	k _{vs} m ³ /h	DN	
14	600	600	600	---	---	0,63	15	281,--
14	600	600	600	---	---	1,0	15	281,--
14	600	600	600	---	---	1,6	15	281,--
14	600	600	600	---	---	2,5	15	281,--
14	600	600	600	---	---	4,0	15	281,--
14	600	600	600	---	---	5,0	**20	294,--
14	600	600	600	---	---	6,3	20	294,--
14	600	600	600	---	---	8	**25	303,--
14	600	600	600	---	---	10	25	303,--
14	480	600	600	---	---	12,5	**32	349,--
14	480	600	600	---	---	16	32	349,--
14	230	530	600	---	---	20	**40	377,--
14	230	530	600	---	---	25	40	377,--
14	120	310	550	---	---	31,5	**50	425,--
14	120	310	550	---	---	40	50	425,--
30	40	150	280	410	600	63	65	724,--
30	---	80	170	260	600	100	80	866,--
30	---	40	100	160	390	160	100	1 207,--

*the max. differential pressure in this table is only valid if used as a mixing valve.



2-Way Valve, Cast-Iron, PN 6 (DN 15 ... 100)

3-way valve used as 2-way valve of cast-iron EN-JL 1040 (GG25) according to DIN EN 1531, flange connection PN 6, service free O-ring stuffing-box sealing from EPDM, leakage rate <0,1% of the kvs-value, plug and stem of stainless steel. Stem for quick-connection. Max. operating temperature 130° C, linear characteristics.

BKF102A000

Linear Actuator Tri-State, 230 VAC

Reversible actuator for 230 VAC, with end position switch, flange 30 mm, travel speed 8 mm/min, enclosure protection IP 43, actuator force 600 N.

AHS106A22 380,--

As AHS106A22, however actuator force **1000 N**.

AHS110A22 457,--

As AHS106A22, however actuator force **1500 N**.

AHS015A22 785,--

As AHS106A22, however travel speed 13,2 mm/min, IP 54, act. force **2000 N**.

AHS020A62 1 130,--

As AHS106A22, however travel speed 25 mm/min, IP 65, act. force **4100 N**.

AHS041A42 1 810,--

Linear Actuator 0 ... 10 VDC / Tri-State, 24VAC

Microprocessor controlled actuator for 24 VAC and analogue control 0...10 VDC or tri-state, position feed back 0 ... 10 VDC, with end position switch, flange 30 mm, travel speed 8 mm/min, enclosure protection IP 43, actuator force 600 N.

AHS106A24Y 420,--

As AHS106A24Y, however actuator force **1000 N**.

AHS110A24Y 495,--

As AHS106A24Y, however travel speed 10 mm/min, actuator force **1500 N**.

AHS015A24Y 915,--

As AHS106A24Y, however travel speed 13,2 mm/min, IP 54, act. force 2000 N.

AHS020F64Y 1 350,--

As AHS106A24Y, however travel speed 25 mm/min, IP 65, act. force **4100 N**.

AHS041F44Y 2 555,--

Linear Actuator Tri-State, 24 VAC

Reversible actuator for 24 VAC, with end position switch, flange 30 mm, travel speed 13,2 mm/min, enclosure protection IP 54, actuator force 2000 N.

AHS020A64 1 230,--

As AHS020A64, however travel speed 25 mm/min, IP 65, act. force **4100 N**.

AHS041A44 2 180,--

Linear actuator Type	AHS106A22 AHS106A24Y	AHS110A22 AHS110A24Y	AHS015A22 AHS015A24Y	AHS020A62 AHS020F64Y AHS020A64	AHS041A42 AHS041F44Y AHS041A44			
2-way valves								
Stroke mm	Δp_0 kPa*	Δp_0 kPa*	Δp_0 kPa*	Δp_0 kPa*	Δp_0 kPa*	kvs m ³ /h	DN	
14	600	600	600	---	---	0,63	15	328,--
14	600	600	600	---	---	1,0	15	328,--
14	600	600	600	---	---	1,6	15	328,--
14	600	600	600	---	---	2,5	15	328,--
14	600	600	600	---	---	4,0	15	328,--
14	600	600	600	---	---	5,0	**20	346,--
14	600	600	600	---	---	6,3	20	346,--
14	600	600	600	---	---	8	**25	362,--
14	600	600	600	---	---	10	25	362,--
14	480	600	600	---	---	12,5	**32	413,--
14	480	600	600	---	---	16	32	3413,--
14	230	530	600	---	---	20	**40	456,--
14	230	530	600	---	---	25	40	456,--
14	120	310	550	---	---	31,5	**50	503,--
14	120	310	550	---	---	40	50	503,--
30	40	150	280	410	600	63	65	815,--
30	---	80	170	260	600	100	80	978,--
30	---	40	100	160	390	160	100	1 358,--



3-Way Valve, Red Brass, PN 16

3-way valve of CC499 K acc. to DIN EN 1982 (RG5), for PN 16, with external thread connection and screw caps, service free O-ring stuffing-box sealing from EPDM, leakage rate <0,1% of the kvs-value, plug and stem of stainless steel. Stem for quick-connection. Max. operating temperature 130°C, linear characteristics, used as mixing or distribution valve.

Type	Price in EUR
BKG221A000	



Linear Actuator Tri-State, 230 VAC

Reversible actuator for 230 VAC, with end position switch, flange 30 mm, travel speed 8 mm/min, enclosure protection IP 43, actuator force 600 N.

AHS106A22	380,--
As AHS106A22, however actuator force 1000 N.	AHS110A22 457,--
As AHS106A22, however actuator force 1500 N.	AHS015A22 785,--



Linear Actuator 0 ... 10 VDC / Tri-State, 24VAC

Microprocessor controlled actuator for 24 VAC and analogue control 0...10 VDC or tri-state, position feed back 0 ... 10 VDC, with end position switch, flange 30 mm, travel speed 8 mm/min, enclosure protection IP 43, actuator force 600 N.

AHS106A24Y	420,--
As AHS106A24Y, however actuator force 1000 N.	AHS110A24Y 495,--
As AHS106A24Y, however travel speed 10 mm/min, actuator force 1500 N.	AHS015A24Y 915,--

Linear actuator Type

3-way valves

Stroke mm	AHS106A22 AHS106A24Y	AHS110A22 AHS110A24Y	AHS015A22 AHS015A24Y	Δp_0 kPa*	Δp_0 kPa*	Δp_0 kPa*	k_{vs} m ³ /h	DN	
14	1600	1600	1600	0,63	1/2"	212,--			
14	1600	1600	1600	1,0	1/2"	212,--			
14	1600	1600	1600	1,6	1/2"	212,--			
14	1600	1600	1600	2,5	1/2"	212,--			
14	1600	1600	1600	4,0	1/2"	212,--			
14	1210	1600	1600	5,0	**3/4"	220,--			
14	1210	1600	1600	6,3	3/4"	220,--			
14	680	1350	1600	8	**1"	245,--			
14	680	1350	1600	10	1"	245,--			
14	480	1000	1600	12,5	**1 1/4"	295,--			
14	480	1000	1600	16	1 1/4"	295,--			
14	230	530	900	20	**1 1/2"	364,--			
14	230	530	900	25	1 1/2"	364,--			
14	120	310	550	31,5	**2"	494,--			
14	120	310	550	40	2"	494,--			

*the max. differential pressure in this table is only valid if used as a mixing valve.

Accessories

for AHS015A22, ...015A32 ...A62, ...A64, ...A72, ...A74

2 limit switches, 5 A / 250 VAC	A2.K	181,--
2 limit switches, 5 A / 250 VAC and 1 potentiometer 1000 Ohm, 1W	**A4.K	284,--

for AHS041..., ASM...

2 limit switches, 5 A / 250 VAC	**A2.M	345,--
2 limit switches, 5 A / 250 VAC and 1 potentiometer 1000 Ohm, 1W	**A4.M	446,--



Actuators and valves are delivered separately. Extra charge for mounting.

** not a stock item **41,--**

Type Price
in EUR



2-Way Valve, Red Brass, PN 16

3-way valve as 2-way valve of CC499 K acc. to DIN EN 1982 (RG5), for PN 16, with external thread connection and screw caps, service free O-ring stuffing-box sealing from EPDM, leakage rate <0,1% of the kvs-value, plug and stem of stainless steel. Stem for quick-connection. Max. operating temperature 130°C, linear characteristics.

BKG121AO00



Linear Actuator Tri-State, 230 VAC

Reversible actuator for 230 VAC, with end position switch, flange 30 mm, travel speed 8 mm/min, enclosure protection IP 43, actuator force 600 N.

AHS106A22 380,--

As AHS106A22, however actuator force **1000 N**.

AHS110A22 457,--

As AHS106A22, however actuator force **1500 N**.

AHS015A22 785,--



Linear Actuator 0 ... 10 VDC / Tri-State, 24VAC

Microprocessor controlled actuator for 24 VAC and analogue control 0...10 VDC or tri-state, position feed back 0 ... 10 VDC, with end position switch, flange 30 mm, travel speed 8 mm/min, enclosure protection IP 43, actuator force 600 N.

AHS106A24Y 420,--

As AHS106A24Y, however actuator force **1000 N**.

AHS110A24Y 495,--

As AHS106A24Y, however travel speed 10 mm/min, actuator force **1500 N**.

AHS015A24Y 915,--

Linear actuator Type

2-way valve

Stroke mm	AHS106A22 AHS106A24Y	AHS110A22 AHS110A24Y	AHS015A22 AHS015A24Y	Δp_0 kPa*	Δp_0 kPa*	Δp_0 kPa*	k_{vs} m ³ /h	DN	
14	1600	1600	1600	0,63	1/2"	212,--			
14	1600	1600	1600	1,0	1/2"	212,--			
14	1600	1600	1600	1,6	1/2"	212,--			
14	1600	1600	1600	2,5	1/2"	212,--			
14	1600	1600	1600	4,0	1/2"	212,--			
14	1210	1600	1600	5,0	**3/4"	220,--			
14	1210	1600	1600	6,3	3/4"	220,--			
14	680	1350	1600	8	**1"	245,--			
14	680	1350	1600	10	1"	245,--			
14	480	1000	1600	12,5	**1 1/4"	295,--			
14	480	1000	1600	16	1 1/4"	295,--			
14	230	530	900	20	**1 1/2"	364,--			
14	230	530	900	25	1 1/2"	364,--			
14	120	310	550	31,5	**2"	494,--			
14	120	310	550	40	2"	494,--			



*the max. differential pressure in this table is only valid if used as a mixing valve.

Type Price
in EUR

3-Way Valve, Cast-Iron, PN 16 (DN 15 ... 100)

3-way valve of cast-iron EN-JL 1040 (GG25) according to DIN EN 1561, flange connection PN 16, service free O-ring stuffing-box sealing from EPDM, leakage rate <0,1% of the kvs-value, plug and stem of stainless steel. Stem for quick-connection. Max. operating temperature 130°C, linear characteristics, used as mixing or distribution valve.

BKF222AO00

3-Way Valve, Cast-Iron, PN 16 (DN 125, 150)

As BKF222AO00, however stem with thread-connection

BLF222AO00

Linear Actuator Tri-State, 230 VAC

Reversible actuator for 230 VAC, with end position switch, flange 30 mm, travel speed 8 mm/min, enclosure protection IP 43, actuator force 600 N.

AHS106A22 380,--

As AHS106A22, however actuator force 1000 N.

AHS110A22 457,--

As AHS106A22, however actuator force 1500 N.

AHS015A22 785,--

As AHS106A22, however travel speed 13,2 mm/min, IP 54, act. force 2000 N.

AHS020A62 1 130,--

As AHS106A22, however travel speed 25 mm/min, IP 65, act. force 4100 N.

AHS041A42 1 810,--

As AHS106A22, however travel speed 25 mm/min, IP 65, act. force 4100 N.

**ASMA11.2 1 850,--

Linear Actuator 0 ... 10 VDC / Tri-State, 24VAC

Microprocessor controlled actuator for 24 VAC and analogue control 0...10 VDC or tri-state, position feed back 0 ... 10 VDC, with end position switch, flange 30 mm, travel speed 8 mm/min, enclosure protection IP 43, actuator force 600 N.

AHS106A24Y 420,--

As AHS106A24Y, however actuator force 1000 N.

AHS110A24Y 495,--

As AHS106A24Y, however travel speed 10 mm/min, actuator force 1500 N.

AHS015A24Y 915,--

As AHS106A24Y, however travel speed 13,2 mm/min, IP 54, act. force 2000 N.

AHS020F64Y 1 350,--

As AHS106A24Y, however travel speed 25 mm/min, IP 65, act. force 4100 N.

AHS041F44Y 2 555,--

As AHS106A24Y, however travel speed 25 mm/min, IP 65, act. force 4100 N.

ASMF14.2Y 2 650,--

Linear Actuator Tri-State, 24 VAC

Reversible actuator for 24 VAC, with end position switch, flange 30 mm, travel speed 13,2 mm/min, enclosure protection IP 54, actuator force 2000 N.

AHS020A64 1 230,--

As AHS020A64, however travel speed 25 mm/min, IP 65, act. force 4100 N.

AHS041A44 2 180,--

As AHS020A64, however travel speed 25 mm/min, IP 65, act. force 4100 N.

**ASMA14.2 2 260,--

Linear actuator Type	AHS106A22 AHS106A24Y	AHS110A22 AHS110A24Y	AHS015A22 AHS015A24Y	AHS020A62 AHS020F64Y AHS020A64	AHS041A42 AHS041F44Y AHS041A44	ASMA11.2 ASMF14.2Y ASMA14.2			
3-way valves									
Stroke mm	Δp_0 kPa*	Δp_0 kPa*	Δp_0 kPa*	Δp_0 kPa*	Δp_0 kPa*	Δp_0 kPa*	k_{vs} m ³ /h	DN	
14	1600	1600	1600	---	---	---	0,63	15	329,--
14	1600	1600	1600	---	---	---	1,0	15	329,--
14	1600	1600	1600	---	---	---	1,6	15	329,--
14	1600	1600	1600	---	---	---	2,5	15	329,--
14	1600	1600	1600	---	---	---	4,0	15	329,--
14	1210	1600	1600	---	---	---	5,0	**20	346,--
14	1210	1600	1600	---	---	---	6,3	20	346,--
14	680	1350	1600	---	---	---	8	**25	356,--
14	680	1350	1600	---	---	---	10	25	356,--
14	480	1000	1250	---	---	---	12,5	**32	384,--
14	480	1000	1250	---	---	---	16	32	384,--
14	230	530	680	---	---	---	20	**40	437,--
14	230	530	680	---	---	---	25	40	437,--
14	120	310	410	---	---	---	31,5	**50	480,--
14	120	310	410	---	---	---	40	50	480,--
30	40	150	280	410	950	---	63	65	806,--
30	---	80	170	260	610	---	100	80	942,--
30	---	40	100	160	390	---	160	100	1 290,--
40	---	---	---	---	---	250	220	**125	2 678,--
40	---	---	---	---	---	170	320	**150	3 391,--

Accessories
page 40

Actuators and valves are delivered separately. Extra charge for mounting.

** not a stock item

41,--



2-Way Valve, Cast-Iron, PN 16 (DN 15 ... 100)

3-way valve used as 2-way valve of cast-iron EN-JL 1040 (GG25) according to DIN EN 1561, flange connection PN 16, service free O-ring stuffing-box sealing from EPDM, leakage rate <0,1% of the kvs-value, plug and stem of stainless steel. Stem for quick-connection. Max. operating temperature 130°C, linear characteristics.

BKF122AO00

2-Way Valve, Cast-Iron, PN 16 (DN 125, 150)

As BKF222AO00, except **stem with thread-connection**

BLF122AO00

Linear Actuator Tri-State, 230 VAC

Reversible actuator for 230 VAC, with end position switch, flange 30 mm, travel speed 8 mm/min, enclosure protection IP 43, actuator force 600 N.

AHS106A22 **380,--**

As AHS106A22, however actuator force **1000 N**.

AHS110A22 **457,--**

As AHS106A22, however actuator force **1500 N**.

AHS015A22 **785,--**

As AHS106A22, however travel speed 13,2 mm/min, IP 54, act. force **2000 N**.

AHS020A62 **1 130,--**

As AHS106A22, however travel speed 25 mm/min, IP 65, act. force **4100 N**.

AHS041A42 **1 810,--**

As AHS106A22, however travel speed 25 mm/min, IP 65, act. force **4100 N**.

****ASMA11.2 1 850,--**

Linear Actuator 0 ... 10 VDC / Tri-State, 24VAC

Microprocessor controlled actuator for 24 VAC and analogue control 0...10 VDC or tri-state, position feed back 0 ... 10 VDC, with end position switch, flange 30 mm, travel speed 8 mm/min, enclosure protection IP 43, actuator force 600 N.

AHS106A24Y **420,--**

As AHS106A24Y, however actuator force **1000 N**.

AHS110A24Y **495,--**

As AHS106A24Y, however travel speed 10 mm/min, actuator force **1500 N**.

AHS015A24Y **915,--**

As AHS106A24Y, however travel speed 13,2 mm/min, IP 54, act. force 2000 N.

AHS020F64Y **1 350,--**

As AHS106A24Y, however travel speed 25 mm/min, IP 65, act. force **4100 N**.

AHS041F44Y **2 555,--**

As AHS106A24Y, however travel speed 25 mm/min, IP 65, act. force **4100 N**.

ASMF14.2Y 2 650,--

Linear Actuator Tri-State, 24 VAC

Reversible actuator for 24 VAC, with end position switch, flange 30 mm, travel speed 13,2 mm/min, enclosure protection IP 54, actuator force 2000 N.

AHS020A64 **1 230,--**

As AHS020A64, however travel speed 25 mm/min, IP 65, act. force **4100 N**.

AHS041A44 **2 180,--**

As AHS020A64, however travel speed 25 mm/min, IP 65, act. force **4100 N**.

****ASMA14.2 2 260,--**

Linear actuator Type	AHS106A22 AHS106A24Y	AHS110A22 AHS110A24Y	AHS015A22 AHS015A24Y	AHS020A62 AHS020F64Y AHS020A64	AHS041A42 AHS041F44Y AHS041A44	ASMA11.2 ASMF14.2Y ASMA14.2			
2-way valves									
Stroke mm	Δp ₀ kPa*	Δp ₀ kPa*	Δp ₀ kPa*	Δp ₀ kPa*	Δp ₀ kPa*	Δp ₀ kPa*	k _{vs} m³/h	DN	
14	1600	1600	1600	---	---	---	0,63	15	374,--
14	1600	1600	1600	---	---	---	1,0	15	374,--
14	1600	1600	1600	---	---	---	1,6	15	374,--
14	1600	1600	1600	---	---	---	2,5	15	374,--
14	1600	1600	1600	---	---	---	4,0	15	374,--
14	1210	1600	1600	---	---	---	5,0	**20	401,--
14	1210	1600	1600	---	---	---	6,3	20	401,--
14	680	1350	1600	---	---	---	8	**25	419,--
14	680	1350	1600	---	---	---	10	25	419,--
14	480	1000	1250	---	---	---	12,5	**32	453,--
14	480	1000	1250	---	---	---	16	32	453,--
14	230	530	680	---	---	---	20	**40	515,--
14	230	530	680	---	---	---	25	40	515,--
14	120	310	410	---	---	---	31,5	**50	562,--
14	120	310	410	---	---	---	40	50	562,--
30	40	150	280	410	950	---	63	65	874,--
30	---	80	170	260	610	---	100	80	1 061,--
30	---	40	100	160	390	---	160	100	1 456,--
40	---	---	---	---	---	250	220	**125	3 042,--
40	---	---	---	---	---	170	320	**150	3 900,--

Accessories
page 40

Actuators and valves are delivered separately. Extra charge for mounting.

**** not a stock item**

41,--



2-Way Valve, Spheroidal Graphite Iron, PN 16/25 (DN 15 ... 50)

2-way valve of spheroidal graphite iron EN-JS 1049 according to DIN EN 1563, flange connection PN 16/25, service free PTFE stuffing-box sealing, stem of stainless steel with thread-connection, plug and seat ring of stainless steel. Max. operating temperature 200°C, equal-percentage characteristics.

Type	Price in EUR
ASF134AT	

2-Way Valve, Spheroidal Graphite Iron, PN 16 (DN 65 ... 100)

2-way valve of spheroidal graphite iron EN-JL 1049, according to DIN EN 1563, flange connection PN 16, service free PTFE stuffing-box sealing, stem of stainless steel with thread-connection, plug and seat ring of stainless steel. Max. operating temperature 200°C, equal-percentage characteristics.

ASF122BT

Actuators, Spring Return, Tri-State, 230 VAC

according to DIN 32730 (without TÜV-Register No.)

Manual reversible emergency actuator (tri-state) for 230 VAC for automatic closing in case of power failure or, security shut-off, travel speed 17,5 mm/min, emergency shut-down speed 150 mm/min. Enclosure protection IP 54, actuator force 900 N.

ASNA01.. ¹⁾	1 690,--
------------------------	----------

As ASNA01..., however closing if not energized.

**ASNA02.. ²⁾	1 690,--
--------------------------	----------

As ASNA01..., however actuator force **2200 N**.

**ASNA201.. ¹⁾	1 980,--
---------------------------	----------

As ASNA01..., however actuator force **2200 N**, closing if not energized.

**ASNA202.. ²⁾	1 980,--
---------------------------	----------

¹⁾ opening if not energized
2-way valves are closed in case of power failure.

²⁾ closing if not energized
3-way valves or 3-way valves used as 2-way valves A to AB is closed in case of power failure.

Linear actuator Type		ASNA01.1 ASNA02.1	ASNA01.2 ASNA02.2	ASNA201.1 ASNA202.1	ASNA201.2 ASNA202.2			
2-way valves								
Stroke mm		Δp_0 kPa*	Δp_0 kPa*	Δp_0 kPa*	Δp_0 kPa*	k_{vs} m ³ /h	DN	
16	PN16/25	2500	---	---	---	0,4	**15	676,--
16		2500	---	---	---	0,63	**15	676,--
16		2500	---	---	---	1,0	**15	676,--
16		2500	---	---	---	1,6	**15	676,--
16		2500	---	---	---	2,5	**15	676,--
16		2500	---	---	---	4,0	**15	676,--
16		1350	---	2500	---	6,3	**25	687,--
16		1350	---	2500	---	10	**25	687,--
30		---	750	---	2370	16	**32	829,--
30		---	430	---	1470	25	**40	867,--
30	PN16	---	240	---	900	40	**50	971,--
30		---	90	---	460	63	**65	1 134,--
30		---	40	---	280	100	**80	1 457,--
30		---	---	---	160	160	**100	1 774,--

Accessories

for ASNA...

2 limit switches, 5 A / 250 VAC

**A2.N	150,--
--------	--------

2 limit switches, 5 A / 250 VAC u. 1 potentiometer 1000 Ohm, 1W

**A4.N	494,--
--------	--------

Actuators with spring return and valves are delivered completely mounted.

** not a stock item



2-Way Valve, Spheroidal Graphite Iron, PN 16/25 (DN 15 ... 50)

2-way valve of spheroidal graphite iron EN-JS 1049 according to DIN EN 1563, flange connection PN 16/25, service free PTFE stuffing-box sealing, stem of stainless steel with thread-connection, plug and seat ring of stainless steel. Max. operating temperature 200°C, equal-percentage characteristics.

Type Price
in EUR

ASF134AT

2-Way Valve, Spheroidal Graphite Iron, PN 16 (DN 65 ... 100)

2-way valve of spheroidal graphite iron EN-JL 1049, according to DIN EN 1563, flange connection PN 16, service free PTFE stuffing-box sealing, stem of stainless steel with thread-connection, plug and seat ring of stainless steel. Max. operating temperature 200°C, equal-percentage characteristics.

ASF122BT

Actuators, Spring Return, 0 ... 10 VDC / Tri-State, 24 VAC

according to DIN 32730 (without TÜV-Register No.)

Manual reversible emergency microprocessor controlled actuator for 24 VAC and control 0 ... 10 VDC or tri-state for automatic closing in case of power failure or, position feed back 0 ... 10 VDC, security shut-off, travel speed 17,5 mm/min, emergency shut-down speed 150 mm/min. Enclosure protection IP 54, actuator force 90 kp.

ASNF014..Y¹⁾ 2 390,--

As ASNF014..Y, however closing if not energized.

**ASNF024..Y²⁾ 2 390,--

As ASNF014..Y, however actuator force 2200 N.

**ASNF214..Y¹⁾ 2 600,--

As ASNF014..Y, however actuator force 2200 N, closing if not energized.

**ASNF224..Y²⁾ 2 600,--

Actuators, Spring return, Tri-State, 24 VAC

according to DIN 32730 (without TÜV-Register No.)

Manual reversible emergency actuator (tri-state) for 24 VAC, actuator force 90 kp. (the other technical data identical to type ASNF014..Y)

**ASNA014..¹⁾ 1 980,--

As ASNA014.., except closing if not energized.

**ASNA024..²⁾ 1 980,--

As ASNA014.., except actuator force 2200 N.

**ASNA214..¹⁾ 2 200,--

As ASNA014.., except actuator force 2200 N, closing if not energized.

**ASNA224..²⁾ 2 200,--

¹⁾opening if not energized
2-way valves are closed in case of power failure.

²⁾closing if not energized
3-way valves or 3-way valves used as 2-way valves A to AB is closed in case of power failure.

Linear actuator Type

2-way valves

Stroke mm	ASNA014.1	ASNA024.1	ASNF014.1Y	ASNF024.1Y	ASNA014.2	ASNA024.2	ASNF014.2Y	ASNF024.2Y	ASNA214.1	ASNA214.1	ASNF214.1Y	ASNF224.1Y	ASNA214.2	ASNA224.2	ASNF214.2Y	ASNF224.2Y	k _v m ³ /h	DN	
16	2500	---	---	---	2500	---	---	---	---	---	---	---	2500	---	---	---	0,4	**15	676,--
16	2500	---	---	---	2500	---	---	---	---	---	---	---	2500	---	---	---	0,63	**15	676,--
16	2500	---	---	---	2500	---	---	---	---	---	---	---	2500	---	---	---	1,0	**15	676,--
16	2500	---	---	---	2500	---	---	---	---	---	---	---	2500	---	---	---	1,6	**15	676,--
16	2500	---	---	---	2500	---	---	---	---	---	---	---	2500	---	---	---	2,5	**15	676,--
16	2500	---	---	---	2500	---	---	---	---	---	---	---	2500	---	---	---	4,0	**15	676,--
16	1350	---	---	---	1350	---	2500	---	---	---	---	---	1350	---	---	---	6,3	**25	687,--
16	1350	---	---	---	1350	---	2500	---	---	---	---	---	1350	---	---	---	10	**25	687,--
30	---	750	---	---	---	750	---	---	---	---	---	---	---	750	---	---	16	**32	829,--
30	---	430	---	---	---	430	---	---	---	---	---	---	---	430	---	---	25	**40	867,--
30	---	240	---	---	---	240	---	---	---	---	---	---	---	240	---	---	40	**50	971,--
30	---	90	---	---	---	90	---	---	---	---	---	---	---	90	---	---	63	**65	1 134,--
30	---	40	---	---	---	40	---	---	---	---	---	---	---	40	---	---	100	**80	1 457,--
30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	160	**100	1 774,--



3-Way Valve, Cast Iron, PN 16 (DN 125 ... 250)

3-way valve of cast iron EN-JL 1040, according to DIN EN 1561, flange connection PN 16, PTFE stuffing-box sealing at DN 125 + DN 150 service free, stem of stainless steel with thread-connection, plug and seat ring of stainless steel. Max. operating temperature 200°C, linear-percentage characteristics, used as mixing or distribution valve.

Type	Price in EUR
ASF222BT	



2-Way Valve, PN 16 (DN 125 ... 250)

2-way valve at DN 125 + DN 150 of spheroidal graphite iron EN-JS 1049 according to DIN EN 1563, at DN 200 + DN 250 of cast iron EN-JL 1040, according to DIN EN 1561, flange connection PN 16, PTFE stuffing-box sealing at DN 125 + DN 150 service free, stem of stainless steel with thread-connection, plug and seat ring of stainless steel. Max. operating temperature 200°C, equal-percentage characteristics.

ASF122BT	
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Linear Actuators Tri-State, 230 VAC

Reversible actuator, 230 VAC, with end position switch, poles 190 mm, flange 48 mm, travel speed 25 mm/min, IP 65, actuator force 4100 N.

**ASMA11.19	1 850,--
-------------	----------

Reversible actuator, 230 VAC, with end position switch, poles 205 mm, flange 48 mm, travel speed 25 mm/min, IP 65, actuator force 8000 N.

**ASLC01.12	3 000,--
-------------	----------

Linear Actuator 0 ... 10 VDC / Tri-State, 24VAC

Microprocessor controlled actuator, 24 VAC and analogue control 0...10VDC or tri-state, position feed back 0 ... 10 VDC, with end position switch, poles 190 mm, flange 48 mm, travel speed 25 mm/min, IP 65, actuator force 4100 N.

ASMF14.19Y	2 650,--
------------	----------

Microprocessor controlled actuator, 24 VAC and analogue control 0...10VDC or tri-state, position feed back 0 ... 10 VDC, with end position switch, poles 190 mm, flange 48 mm, travel speed 25 mm/min, IP 65, actuator force 8000 N.

**ASLG04.12Y	3 850,--
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Linear Actuator Tri-State, 24 VAC

Reversible actuator for 24 VAC, with end position switch, poles 190 mm, flange 48 mm, travel speed 25 mm/min, IP 65, actuator force 4100 N.

**ASMA14.19	2 260,--
-------------	----------

Reversible actuator for 24 VAC, with end position switch, poles 205 mm, flange 48 mm, travel speed 25 mm/min, IP 65, actuator force 8000 N.

**ASLC04.12	3 250,--
-------------	----------



Linear actuator Type

3-way valves

Stroke mm	ASMA11.19 ASMF14.19Y ASMA14.19 Δp_0 kPa*	ASLC01.12 ASLF04.12Y ASLC04.12 Δp_0 kPa*	k_{vs} m ³ /h	DN	
50	260	600	250	**125	3 460,--
50	180	430	320	**150	4 975,--
65	---	180	630	**200	8 965,--
65	---	110	1000	**250	16 020,--

2-way valves

Stroke mm	Δp_0 kPa	Δp_0 kPa	k_{vs} m ³ /h	DN	
50	230	550	250	**125	2 637,--
50	150	370	400	**150	3 485,--
65	---	180	630	**200	6 137,--
65	---	110	1000	**250	10 945,--

Accessories

for ASMA...

2 limit switches, 5 A / 250 VAC	**A2.M	345,--
2 limit switches, 5 A / 250 VAC and 1 potentiometer 1000 Ohm, 1W	**A4.M	446,--

for ASLC...

2 limit switches, 5 A / 250 VAC	**A2.L	365,--
2 limit switches, 5 A / 250 VAC and 1 potentiometer 1000 Ohm, 1W	**A4.L	465,--

Actuators and valves are delivered completely mounted.

** not a stock item



*the max. differential pressure in this table is only valid if used as a mixing valve.

Cancelled products are available while supplies last!

List of content Spare devices

Building Management System RCO	Expander, Slave-Modules	Page 48, 50
	Building Management Software, Single-room-controller	Page 49
	Operator panel	Page 49
Actuators	Actuators for Valves	Page 50, 51
Control valves	3-Way- and 2-Way Compact valves	Page 51
Setpoint adjusters	Setpoint adjusters	Page 49

List of content Spare parts

Control valves	Stuffing box sealing PN6	Page 52
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	Stuffing box sealing PN25	Page 55
	Stuffing box sealing PN40	Page 55
	Sealing Set for Mixing Valves	Page 56
	Renovation set for Mixing Valves	Page 57

Type **Price**
in EUR



I/O Module

Quick-Connector to RCO 16C-M.

- 6 universal inputs (NTC10kΩ, NTC30kΩ, Pt1000, Ni1000, 0 ... 10 VDC)
- 4 digital inputs (volt-free contact or external 24 VAC, pulse counting up to 20 Hz)
- 4 analog outputs (0 ... 10 VDC)
- 2 digital outputs (volt-free, 24 VAC, max. 500 mA)

DIN-rail mounting, operating voltage supplied by master, power consumption: 1VA , protection IP20, aluminum housing, Size: 110 x 133 x 30 mm.

RCO 16C-E on request



Slave Digital Inputs Module

L-Bus Slave Module

- 16 digital inputs (volt-free contact or external 24 VAC, pulse counting up to 20 Hz)

DIN-rail mounting, operating voltage: 24 VAC / DC +/- 10 %, power consumption: 2VA , protection IP20, aluminum housing, Size: 110 x 133 x 30 mm.

RCO 16C-S on request



Slave Analog I/O Module

L-Bus Slave Module

- 8 universal inputs (NTC10kΩ, NTC30kΩ, Pt1000, Ni1000, 0 ... 10 VDC)
- 6 analog outputs (0 ... 10 VDC)

DIN-rail mounting, operating voltage: 24 VAC / DC +/- 10 %, power consumption: 3,4VA , protection IP20, aluminum housing, Size: 110 x 133 x 30 mm.

RCO 14C-S on request



Slave I/O Module (Single room controller)

L-Bus Slave Module

- 2 temperature inputs (NTC10kΩ, NTC30kΩ)
- 2 digital inputs (volt-free contact)
- 5 digital outputs (relay, 230 VAC, max. 4 A)

DIN-rail mounting, operating voltage supplied by master, power consumption: 0,5 VA , protection IP20, aluminum housing, Size: 110 x 133 x 30 mm.

RCO 9C-S on request



Slave Analog I/O Module

L-Bus Slave Module

- 4 universal inputs (NTC10kΩ, NTC30kΩ, 0 ... 10 VDC)
- 4 analog outputs (0 ... 10 VDC)

DIN-rail mounting, operating voltage: 24 VAC / DC +/- 10 %, power consumption: 3 VA , protection IP20, aluminum housing, Size: 110 x 133 x 30.

RCO 8C-S on request



Slave Analog I/O Module (Single-room controller)

L-Bus Slave. This module is preprogrammed with a Fan-Coil application.

- 4 inputs for room-sensor, setpoint, switch for FAN-Coil out / auto and window contact
- 4 outputs for heating, cooling, ventilator and operation LED

DIN-rail mounting, operating voltage: 24 VAC / DC +/- 10 %, power consumption: 3 VA , protection IP20, aluminum housing, Size: 110 x 133 x 30 mm.

RCO 8C-fS on request

Type Price
in EUR



Building Management Software RCO-view

Web-based Building Management Software designed on the modern Microsoft .NET Framework Technology. The software is used to operate, monitor and control HVAC systems in buildings for the Building automation system Controlesta RCO. Integrated Engineering-tool for on- and offline programming, freely configurable, animated visualisations for graphical operation, Alarm- and messenger management. Access management for user and user groups, event logs, historical- and online trends, multi-site capable.

Operating systems: Windows 10

Consisting of:

- USB Dongle

Software license for 100 BMS data points

Software license for 300 BMS data points

Software license for 1000 BMS data points

Software license for 2500 BMS data points

Software license for 5000 BMS data points

Software license without limitation of BMS data points

RCO-view 100 on request

RCO-view 300 on request

RCO-view 1000 on request

RCO-view 2500 on request

RCO-view 5000 on request

RCO-view 9999 on request

Dealer Version as working environment for project and application development (projects / pages / widgets, etc.).

The number of data points is not limited. A pop-up window appears regularly and has to be acknowledged.

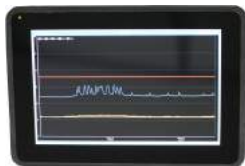
RCO-view DV for Partner



SD-Memory-Card

SD-Memory-Card with 2 GB for data and program memory suitable for Controllers RCO5... / RCO7...

RCO000D-C2 on request



Touch operator panel 17"

17" TFT-LCD Touch operator panel, active display 337,9 x 270,4 mm, resolution 1280 x 1024 Pixel, Contrast ratio 800:1, brightness 250 cd/m², response time 8 ms, backlight. Pre-configured for web server connection. For door mounting, power supply over main adapter 100-240 VAC / 12VDC, power consumption 18 W, housing B x H x T, 274 x 190 x 38 mm, cutout dimension B x H, 245 x 165 mm

Consisting of:

- Touch operator panel 17"
- Main adapter 100-240 VAC / 12 VDC

RCO690D-S on request



Setpoint Adjusters with Room-Temp. Sensors

Setpoint adjuster for wall mounting with range +/- 3 K to adjust the setpoint for room-temperature, NTC+Pt1000-room sensor. PVC housing. Enclosure protection IP 20.

FBR700A02 58,--



Setpoint adjuster for wall mounting with range +/- 3 K to adjust the setpoint for room-temperature, presence button, NTC+Pt1000-room sensor. PVC housing. Enclosure protection IP 20.

FBR710A02 60,--



Setpoint adjuster for wall mounting with range +/- 3 K to adjust the setpoint for room-temperature, special key to select "auto, 0, I", NTC+Pt1000-room sensor. PVC housing. Enclosure protection IP 20.

FBR703A02 78,--



Setpoint adjuster for wall mounting with range +/- 3 K to adjust the setpoint for room-temperature, special key to select "auto, 0, I, II", NTC+Pt1000-room sensor. PVC housing. Enclosure protection IP 20.

FBR704A02 80,--



Setpoint adjuster for wall mounting with range +/- 3 K to adjust the setpoint for room-temperature, presence button, special key to select "auto, 0, I, II, III", NTC+Pt1000-room sensor. PVC housing. Enclosure protection IP 20.

FBR715A02 80,--

Accessories page 15 ... 17, 19

Sensors and Transducer page 20 ... 23



Linear Actuators Tri-State, 230 VAC

Reversible actuator for 230 VAC, with end position switch, poles 120 mm, flange 30 mm, thread connection M6, travel speed 8 mm/min, IP 43, actuator force 600 N.

As ASKC11.1, however flange 35 mm, thread connection M10.

As ASKC11.1, however actuator force 900 N.

As ASKC11.1, however flange 35 mm, thread connection M10, actuator force 900 N.

As ASKC11.1, however poles 152 mm, travel speed 25 mm/min, actuator force 2200 N.

As ASKC11.1, however poles 152 mm, flange 35 mm, thread connection M10, travel speed 25 mm/min, actuator force 2200 N.

As ASKC11.1, however poles 190 mm, flange 48 mm, thread connection M10, travel speed 25 mm/min, actuator force 2200 N.

Type Price
in EUR

ASKC11.1 650,--

ASKC11.2 650,--

ASKC21.1 855,--

ASKC21.2 855,--

ASMA01.10 1 800,--

ASMA01.2 1 800,--

ASMA01.9 1 800,--

Linear Actuators Tri-State, 24 VAC

Reversible actuator for 24 VAC, with end position switch, poles 152 mm, flange 30 mm, thread connection M6, travel speed 25 mm/min, IP 54, actuator force 2200 N.

As ASMA04.10, however flange 35 mm, thread connection M10.

As ASMA04.10, however poles 190 mm, flange 48 mm, thread connection M10.

**ASMA04.10 2 150,--

**ASMA04.2 2 150,--

**ASMA04.9 2 150,--

Linear Actuators 0 ... 10 VDC / Tri-State, 24 VAC

Microprocessor controlled actuator for 24 VAC and analogue control 0 ... 10 VDC or tri-state, position feed back 0 ... 10 VDC, flange 30 mm, thread connection M6, travel speed 8 mm/min, IP 43, actuator force 600 N.

As ASKF12.1Y, however flange 35 mm, thread connection M10.

As ASKF12.1Y, however actuator force 900 N.

As ASKF12.1Y, however flange 35 mm, thread connection M10, actuator force 900 N.

As ASKF12.1Y, however poles 152 mm, travel speed 25 mm/min, actuator force 2200 N.

As ASKF12.1Y, however poles 152 mm, flange 35 mm, thread connection M10, travel speed 25 mm/min, actuator force 2200 N.

As ASKF12.1Y, however poles 190 mm, flange 48 mm, thread connection M10, travel speed 25 mm/min, actuator force 2200 N.

ASKF12.1Y 540,--

ASKF12.2Y 540,--

ASKF22.1Y 680,--

ASKF22.2Y 680,--

**ASMF04.10Y 2 500,--

**ASMF04.2Y 2 500,--

**ASMF04.9Y 2 500,--

** not a stock item

Type Price
in EUR

Compact 3-way valve and 2-way valve, Red Brass, PN 16



3-way valve of CC499 K acc. to DIN EN 1982 (RG5), for PN 16, with external thread connection and screw caps, service free O-ring stuffing-box sealing from EPDM, leakage rate <0,1% of the kvs-value, plug and stem of stainless steel. Stem for quick-connection. Max. operating temperature 120°C, linear characteristics, used as mixing.

A blind spade delivered along with the valve to change it to a 2-way valve.

KKG221A000

Linear Actuator Tri-state, 230 VAC

Reversible actuator for 230 VAC with 1,5 m connecting cable, end position switch, travel time 220 sec., power rating 3,5 VA, actuator force 500 N, enclosure protection IP 40.

KHK005A02
(MD50)

208,--

Linear Actuator 0 ... 10 VDC, 24 VAC/DC

Microprocessor controlled actuator for 24 VAC/DC and analogue control 0 (2) ... 10 VDC or tri-state, with position feed back, with 1,5 m connecting cable, travel time 220 sec., power rating 2,6 W, actuator force 500 N, enclosure protection IP 40.

KHK005A04Y
(MD50-R)

208,--

Linear actuator Type

3-way- and 2-way valves

Stroke mm	Δp_0 kPa*	k_{vs} m ³ /h	DN	
10	1210	0,63	1/2"	177,--
10	1210	1,0	1/2"	177,--
10	1210	1,6	1/2"	177,--
10	1210	2,5	1/2"	177,--
10	920	4,0	3/4"	182,--
10	920	6,3	3/4"	182,--
10	500	6,3	1"	214,--
10	500	8	1"	214,--
10	500	10	1"	214,--
10	350	10	1 1/4"	255,--
10	350	16	1 1/4"	255,--
10	150	25	1 1/2"	357,--
10	70	35	2"	388,--

Butterfly valves DFH

Maintenance free stuffing box sealing for butterfly valves PN 6-16
 Butterfly type: DFH DN 25 ... 80
 Year of completion: Up to 1992

Type	Price in EUR
AZV013A	75,--

Butterfly valves DFH

Maintenance free stuffing box sealing for butterfly valves PN 6-16
 Butterfly type: DFH DN 100 ... 150
 Year of completion: Up to 1992

AZV014A	85,--
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Butterfly valves DFH + DFD

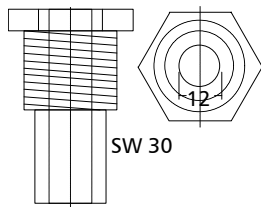
Maintenance free stuffing box sealing for butterfly valves PN 6-16
 Butterfly type: DFD DN 25 ... 150
 Year of completion: From 1993

AZV013B	85,--
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3-way-/2-way valve, Cast Iron, PN 6 (DN65 ... 100)

Maintenance free PTFE stuffing box sealing for cast iron valves PN 6
 Valve-Type: BLF102A0 DN 65 ... 100
 BLF202A0 DN 65 ... 100

AZV007A	95,--
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3-way-/2-way valve, Cast Iron, PN 6 (DN15 ... 50)

Maintenance free double O-ring stuffing box sealing for cast iron valves PN 6
 Valve-Type: BKF102AO00 DN 15 ... 50
 BKF202AO00 DN 15 ... 50

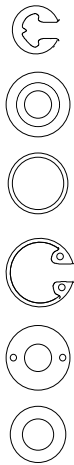
**AZV022A	105,--
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3-way-/2-way valve, Cast Iron, PN 6 (DN65 ... 100)

Maintenance free double O-ring stuffing box sealing for cast iron valves PN 6
 Valve-Type: BKF102AO00 DN 65 ... 100
 BKF202AO00 DN 65 ... 100

**AZV023A	175,--
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** not a stock item



3-way-/2-way valve, Cast Brass, PN16 (DN1/2" ... 1 1/2")

Maintenance free stuffing box sealing for cast brass valves PN16
 Valve-Type: AVE201A DN 1/2" ... 1 1/2"

Type	Price in EUR
AZV004A	35,--

3-way-/2-way valve, Red Brass, PN16 (DN15 ... 50)

Maintenance free stuffing box sealing for red brass or cast iron valves PN 16
 Valve-Type: KKG121A0 DN 1/2" ... 2"
 KKG221A0 DN 1/2" ... 2"

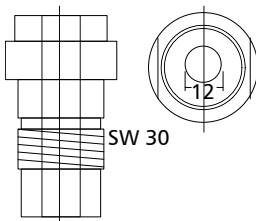
AZV021A	103,--
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3-way-/2-way valve, Cast Iron, PN 16 (DN15 ... 100)

Maintenance free stuffing box sealing for cast iron valves PN 16

Valve-Type: ASF122AT DN 32 ... 100
 ASF222AT DN 32 ... 100
 AKF622AT00 DN 65 ... 100
 AKF722AT00 DN 32 ... 100

AZV010A	236,--
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3-way-/2-way valve, Cast Iron, PN 16 (DN15 ... 250)

4 piece graphite packing rings for cast iron valves PN 16

Valve-Type: AAB142AV DN 15 ... 250
 AAB242AV DN 15 ... 200
 ASF122AT DN 125 ... 250
 ASF222AT DN 125 ... 200

AZV011B	110,--
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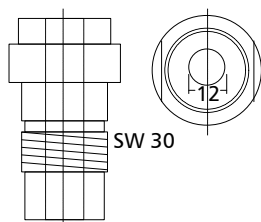
	Type	Price in EUR
3-way-/2-way valve, Cast Iron, PN 16 (DN1/2" ... 2", DN15 ... 50)		
Maintenance free stuffing box sealing for cast iron valves PN 16	**AZV022A	105,--
Valve-Type: BKG121AO00 DN 1/2" ... 2"		
BKG221AO00 DN 1/2" ... 2"		
BKF122AO00 DN 15 ... 50		
BKF222AO00 DN 15 ... 50		
3-way-/2-way valve, Cast Iron, PN 16 (DN65 ... 100)		
Maintenance free stuffing box sealing for cast iron valves PN 16	**AZV023A	175,--
Valve-Type: BKF122AO00 DN 65 ... 100		
BKF222AO00 DN 65 ... 100		
BLF122AO00 DN125 ... 150		
BLF222AO00 DN125 ... 150		
3-way valve, Spheroidal Graphite Iron, PN 16 (DN15)		
Maintenance free stuffing box sealing for spheroidal graphite iron valves PN 16	**AZV024A	134,--
Valve-Type: AKF722BT00 DN 15		
3-way valve, Spheroidal Graphite Iron, PN 16 (DN25, 32)		
Maintenance free stuffing box sealing for spheroidal graphite iron valves PN 16	**AZV025A	134,--
Valve-Type: AKF722BT00 DN 25, 32		
3-way valve, Spheroidal Graphite Iron, PN 16 (DN40)		
Maintenance free stuffing box sealing for spheroidal graphite iron valves PN 16	**AZV026A	144,--
Valve-Type: AKF722BT00 DN 40		
3-way valve, Spheroidal Graphite Iron, PN 16 (DN50)		
Maintenance free stuffing box sealing for spheroidal graphite iron valves PN 16	**AZV027A	155,--
Valve-Type: AKF722BT00 DN 50		
3-way-/2way valve, Spheroidal Graphite Iron, PN 16 (DN65)		
Maintenance free stuffing box sealing for spheroidal graphite iron valves PN 16	**AZV028A	170,--
Valve-Type: AKF722BT00 DN 65		
AKF622BT00 DN 65		
ASF122BT DN 65		
3-way-/2way valve, Spheroidal Graphite Iron, PN 16 (DN80)		
Maintenance free stuffing box sealing for spheroidal graphite iron valves PN 16	**AZV029A	194,--
Valve-Type: AKF722BT00 DN 80		
AKF622BT00 DN 80		
ASF122BT DN 80		
3-way-/2way valve, Spheroidal Graphite Iron, PN 16 (DN100)		
Maintenance free stuffing box sealing for spheroidal graphite iron valves PN 16	**AZV030A	346,--
Valve-Type: AKF722BT00 DN 100		
AKF622BT00 DN 100		
ASF122BT DN 100		
3-way-/2-way valve, PN 16 (DN125, 150)		
Maintenance free stuffing box sealing for cast iron valves PN 16	**AZV031A	266,--
Valve-Type: ASF122BT DN 125, 150		
ASF222BT DN 125, 150		
3-way-/2-way valve, PN 16 (DN125, 150)		
Maintenance free stuffing box sealing for cast iron valves PN 16	**AZV032A	289,--
Valve-Type: ASF122BT DN 200, 250		
ASF222BT DN 200, 250	** not a stock item	

Type Price
in EUR

3-way-/2-way valve, Spheroidal Graphite Iron, PN 25 (DN15 ... 25)

Maintenance free stuffing box sealing for spheroidal graphite iron valves PN 25

AZV010A 236,--

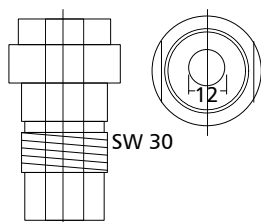


Valve-Type:	ASF134AT	DN 32 ... 100
	ASF234AT	DN 32 ... 100
	AKF633AT00	DN 32 ... 100
	AKF733AT00	DN 32 ... 100

3-way-/2-way valve, Cast Steel, PN 40 (DN15 ... 100)

Maintenance free stuffing box sealing for cast steel valves PN 40

AZV010A 236,--



Valve-Type:	ASF133AT	DN 32 ... 100
	ASF233AT	DN 32 ... 100
	AKF644AT00	DN 32 ... 100
	AKF744AT00	DN 32 ... 100

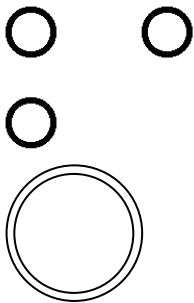
3-way-/2-way valve, Cast Iron, PN 40 (DN15 ... 150)

4 pieces graphite packing rings for cast iron valves PN 40

AZV011B 110,--

Valve-Type:	AAB153AV	DN 15 ... 150
	AAB253AV	DN 15 ... 150
	ASF133AT	DN 125 ... 150
	ASF233AT	DN 125 ... 150

	Type	Price in EUR
Sealing set for 3-/4-way mixing vales VRG131/141 DN 1/2" and 3/4"	AZM160A	108,--
for 3-/4-way mixing valves VRG131/141 DN 1"	AZM161A	108,--
for 3-/4-way mixing VRG131/141 DN 1 1/4" and 1 1/2"	AZM162A	108,--
for 3-/4-way mixing valves VRG131/VRG141 DN 2"	AZM163A	108,--
Sealing set consisting of: 2 x O-Ring 1 x Support bushing 3 x Cover gasket size 1, 2 and 3 Suitable for:	AZM175A	99,--
As AZM175A, however Suitable for:	H3G DN 3/4" ... 2" H3F DN 20 ... 65 H4G DN 3/4" ... 2" H4F DN 20 ... 65 H3F DN 80 ... 150 H4F DN 80 ... 150	AZM176A 103,--



Spare parts

Type Price
in EUR

Renovation set for 3-way Mixing Valves

consisting of:
1 x Adjustment knob
1 x Scale
2 x O-Ring
1 x Support bushing
3 x Cover gasket size 1, 2 and 3
1 x Cover size 1
1 x Interior set
Suitable for:

H3G DN 3/4" ... 1 1/2"
H3F DN 20, 25

AZM181A 318,--

As AZM181A, however suitable for:

H3G DN 2"
H3F DN 32, 40

AZM182A 557,--

As AZM181A, however suitable for:

H3F DN 50, 65

**AZM184A 710,--

As AZM181A, however suitable for:

H3F DN 80

**AZM186A 1 105,--

As AZM181A, however suitable for:

H3F DN 100

**AZM187A 1 392,--

As AZM181A, however suitable for:

H3F DN 125

**AZM188A 1 680,--

As AZM181A, however suitable for:

H3F DN 150

**AZM189A 2 160,--

Renovation set for 4-way Mixing Valves

consisting of:
1 x Adjustment knob
1 x Scale
2 x O-Ring
1 x Support bushing
3 x Cover gasket size 1, 2 and 3
1 x Cover size 1
1 x Interior set
Suitable for:

H4G DN 3/4" ... 1 1/2"

AZM281A 311,--

As AZM281A, however suitable for:

H4G DN 2"
H4F DN 32, 40

**AZM282A 610,--

As AZM281A, however suitable for:

H4F DN 80

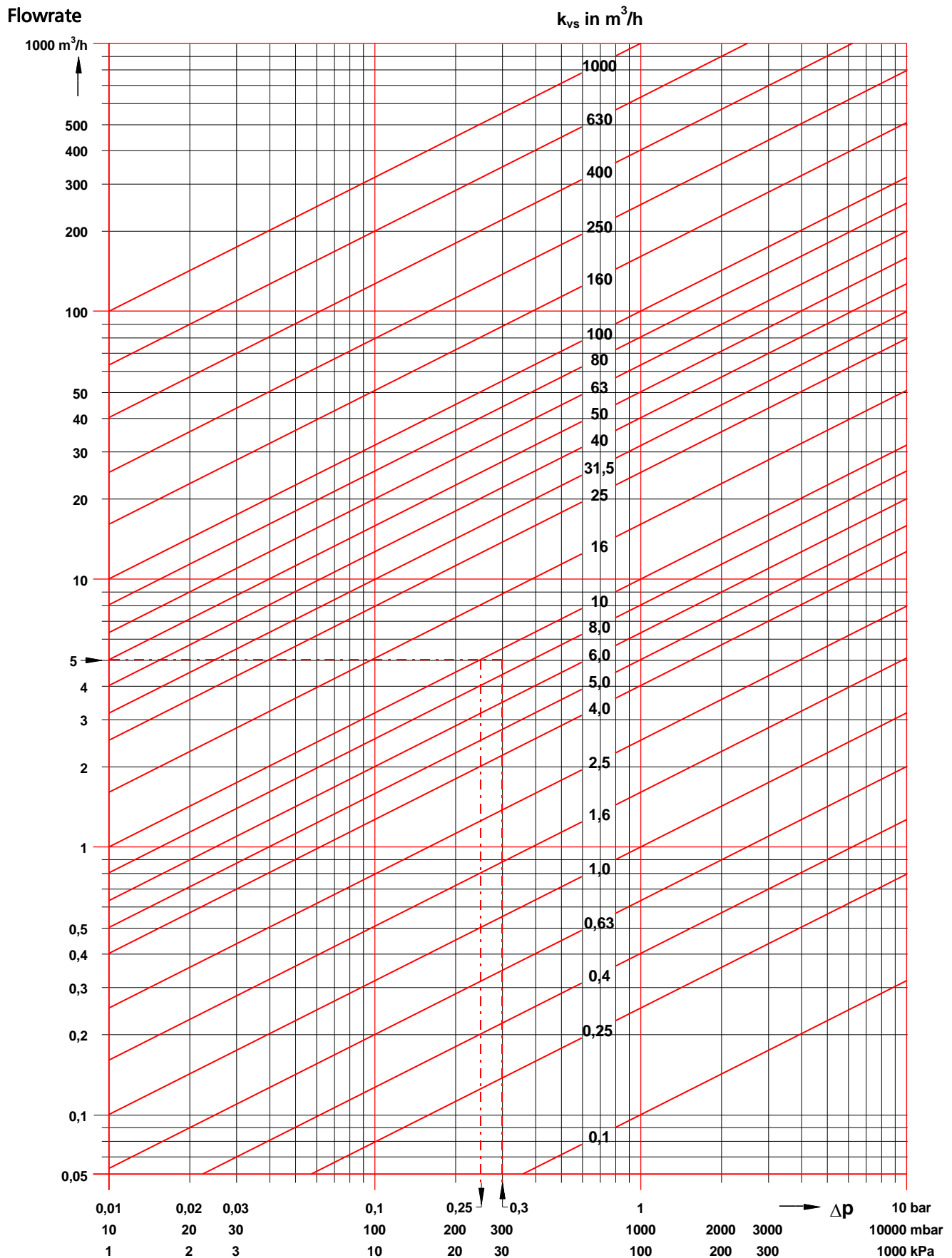
**AZM286A 1 180,--

As AZM281A, however suitable for:

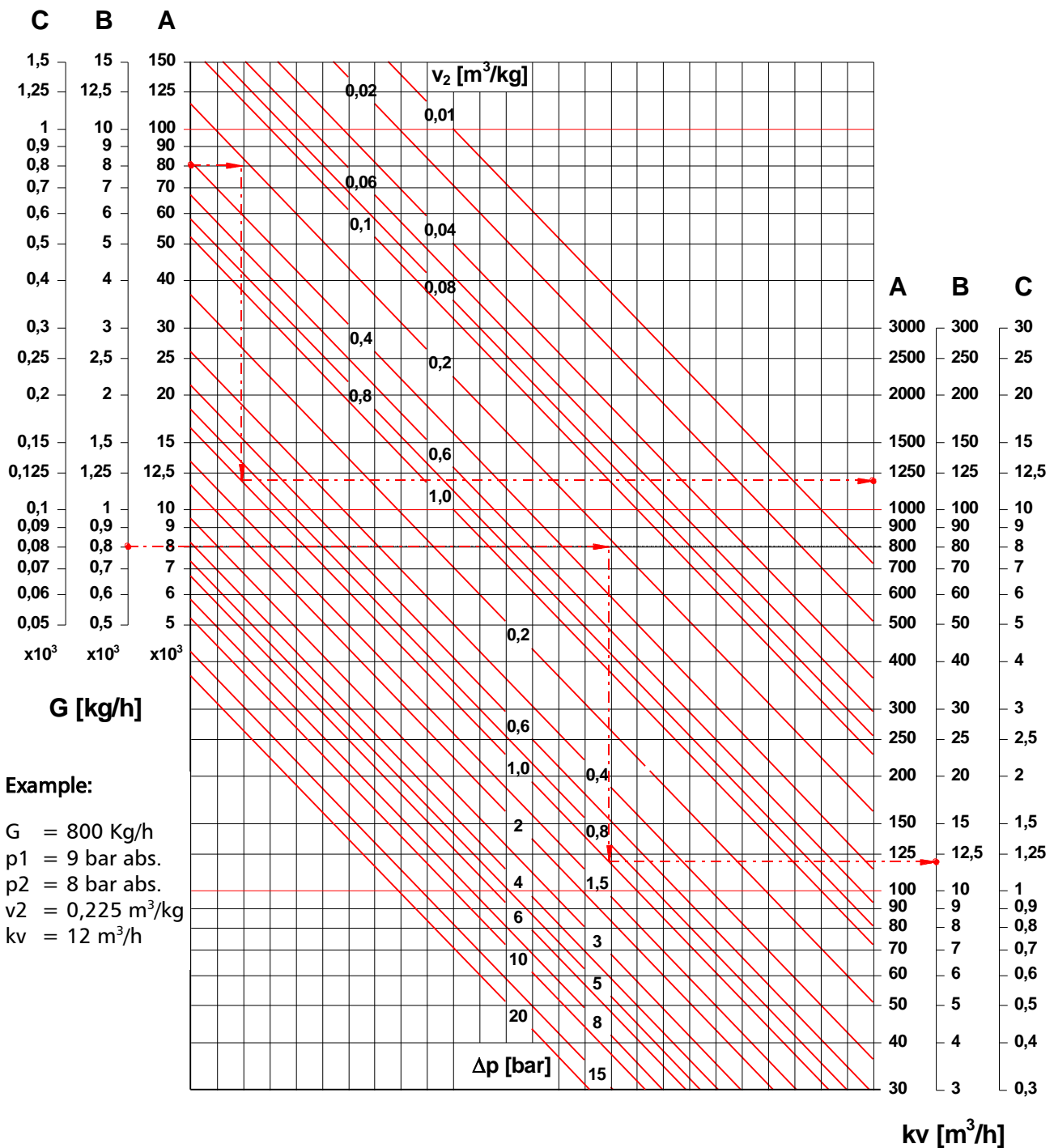
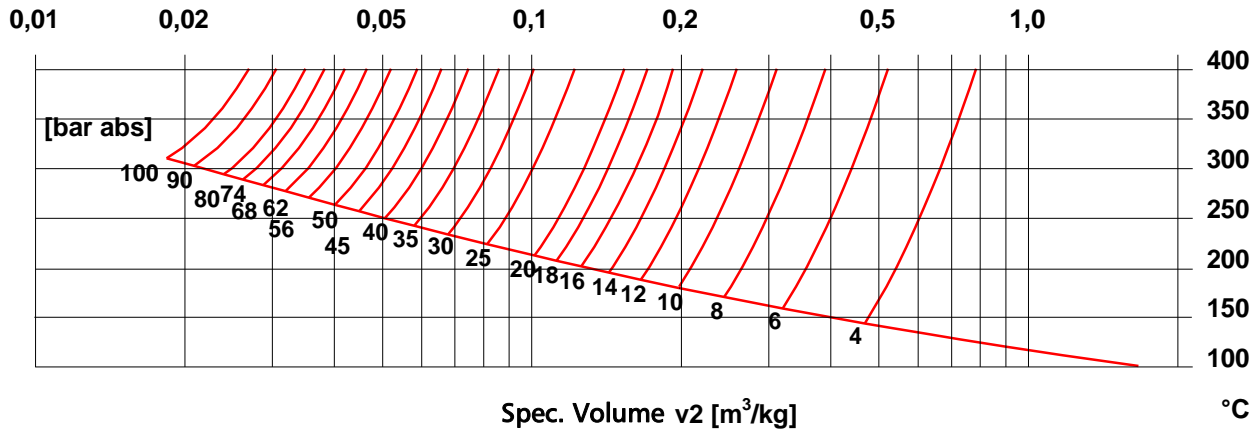
H4F DN 100, 125

**AZM287A 1 298,--

** not a stock item



Nomogram to Determine the k_v -Value of Steam



1. General

The general terms and conditions of business apply to all offers and orders. Deviations from said terms must be agreed in writing to be valid. Verbal arrangements, including telephone arrangements, are only valid if confirmed in writing by us.

2. Offers, documents and drawings

- 2.1. Our offers are subject to alteration.
- 2.2. Documents and drawings remain our property and may not be made available to a third party, in particular any competitor, without our written consent. Copyright and intellectual property must be observed. Such violations shall result in litigation.

3. Nature and scope of the delivery and/or service

- 3.1. Our order confirmation or, where such confirmation does not exist, our offer is exclusively decisive with regard to the nature and scope of the delivery and/or service.
- 3.2. Our obligation to provide a delivery and/or service shall assume that the customer has been subject to a credit check. Should the financial position of the customer deteriorate, he shall undertake to remove the risk to the purpose of the contract through contemporaneous performance or the furnishing of collateral within a reasonable time-limit. Where this is not fulfilled, we reserve the right to withdraw from the contract. In such a case, the customer may not claim for damages.

4. Pricing

- 4.1. Our prices do not include value-added tax or packing, and are delivered ex works from Konstanz. The extra cost of express or similar urgent delivery shall fall to the customer. Engineering services, installation, commissioning and adjustment are not included.
- 4.2. Rises in wages, the cost of materials and other factors shall precipitate appropriate price rises, for non-traders, 4 months from conclusion of the contract. Should the customer not approve of the price rises, both parties shall be entitled to withdraw from the contract within one week.
- 4.3. The minimum invoice value per order and/or provision of goods, repair work or customer services is EUR 50.00 net excluding value-added tax, transport and packing costs.

5. Place of performance and jurisdiction

is, in both instances, Konstanz.

This also applies to exchange and cheque processing.

The business relationship between the parties, including when the head office of the customer is located abroad, is subject to German law.

6. Terms of payment

- 6.1. Our invoices for deliveries are payable within 30 days net from issue of invoice.
Our invoices for services, especially repair work, are payable immediately net terms only.
- 6.2. The customer may only set off claims with the written consent of Elesta building automation GmbH, unless this is legally recognised or a legal entitlement.
- 6.3. The assignment of claims or payments from Elesta building automation GmbH, for another reason, shall require the prior written consent of Elesta in order to be valid.
- 6.4. In the event of late payment, interest shall be applied at 5% above the basic rate of the European Central Bank.

7. Terms of delivery

- 7.1. Our delivery times are non-binding unless mutually arranged.
- 7.2. We reserve the right to defer a delivery time
 - a) should an event of any kind occur for which we are not responsible, and which negatively impacts our or our supplier's normal progression of work in conformance with the contract, e.g. shortage of materials, industrial action, strike or force majeure.
 - b) should the details necessary for the completion of the order not be received by us on time or be subsequently altered.
- 7.3. The call-off of ordered goods must be completed within no later than 12 months, unless separate written agreement has been reached.
- 7.4. Should a delivery time and a reasonable extension not be met, for which we are responsible, the customer may make a claim for documented damages to a maximum however of 5% of the value of the relevant part of the service, which cannot be out to its intended use due to the late production of associated individual items.

8. Passing of risk

Goods are dispatched to the account of and at the risk of the customer, including free of charge deliveries. Claims for damages may only be asserted in cases where we are responsible.

9. Liability for defects

- 9.1. We are liable for products supplied by us within the framework of statutory legislation and where not limited by the following rules.
- 9.2. There must in general be a reasonable time-limit for performance or rectification of at least three weeks, so that the rights provided for by law can be avoided before expiry of the time-limit unless special circumstances can be proved to exist on the part of the creditor and timely notification is given of such.
- 9.3. A claim for damages based on the violation of contractual duties which are not principal duties may only exist in the case of intent and gross negligence.
- 9.4. It is also agreed that liability to pay damages is limited to material defects which are the direct result of the breach of duty.
- 9.5. Liability is also limited to damages which typically arise in delivery transactions of the kind normally carried out.
- 9.6. A stated quality therefore only represents the transfer of a "guarantee" where this has been additionally expressly agreed and is marked as a transfer of guarantee.
The same applies to the transfer of the purchase risk on the delivery item.
- 9.7. The liability for damages is excluded in the case of natural wear, and for damage which occurs after delivery due to incorrect or negligent handling, excessive demand on use, failure to observe our fitting, operating or maintenance instructions, unauthorised tampering, unsuitable equipment, defective construction work or unforeseen electrical or chemical influences.
- 9.8. Elesta's liability is lifted in the case of damage resulting from improper modifications or maintenance work performed by the customer or third party.
- 9.9. Software is produced and advised with the necessary care. Elesta is not liable for defective function for which it is not responsible and is therefore not liable for any resulting damage. Responsibility for the proper use of software and hardware falls exclusively to the purchaser.
- 9.10. We guarantee our products to be free of defect for a period of two years from the date of delivery within the framework of the existing liability having regard for the above exclusions from liability and limitations of liability.

10. Liability for other reasons

Other claims made on us or our vicarious agents by the customer, for whatever legal reason, in particular at the time of contract negotiation, for delay, positive violation of a claim or tort are excluded unless they concern intent or -in the case of non-traders- gross negligence.

11. Returns

The purchaser is basically not entitled to return goods supplied by us. The return of equipment in its original packaging is only permitted with our express, written consent. In all cases, we are entitled to deduct at least 15% as a penalty from the invoiced amount in the case of returned goods. The return of replacement parts is basically not permitted.

12. Reservation of ownership

We reserve ownership of all goods supplied by us until complete payment has been made of all accrued and accruing claims arising from the business relation or other legal basis between us and the purchaser. The reservation of ownership also exists where individual claims are included in a rolling invoice and the balance has been acknowledged. The purchaser is bound to store such reserved property carefully. He must provide special storage for such property on request. He may dispose of reserved property only within the framework of the usual, proper course of business. Pledging or transferring by way of security of any kind is not permitted. He must notify us immediately of any access by a third party. He must insure the property against fire and theft at his own cost and be able to prove such insurance to us at any time on request. Claims by the seller made against the insurance on substituted performance are hereby now assigned to us.
The purchaser may not acquire ownership to goods by processing them with another product. Processing is likewise performed for us. Processed goods also serve as security for us as the conditional purchaser.
Where external goods which do not belong to us are used by the purchaser, we, become the owner of the new products to the percentage of the value of our goods in relation to the external goods. The new products arising from the processing are considered our reserved property.
All claims by the purchaser arising from the resale of reserved property are assigned to us. Where the reserved property is sold to the purchaser together with external goods not belonging to us, whether or not it has undergone processing, the claim on the purchase price is considered assigned only up to the value of the reserved property.
The purchaser is entitled to call in the claim from the resale. At our request, he must notify the debtor of the assigned claim. We may then show the debtor the assignment.
Our reservation of ownership is conditional to the extent that on full payment of our claims arising from the business relation it passes to the purchaser without any further ownership of the reserved property and he becomes entitled to the assigned claims.

Training

The current rapid technology cycles and the associated new product versions offer you the opportunity to develop innovative solutions. Therefore it's important that your staff is trained and certified for the latest products and in technical terms as well as in terms of sales and marketing.

Elesta offers qualified training courses for products and applications of the Controlesta building automation and bms-software product family to its partners. Corresponding to our motto "Efficient, Innovative, Sustainable" we enable our partners to apply our products and systems safely and efficiently. The following training modules are available:

- **Controlesta RCO-D Basic training**
Introduction, operation and application of the building automation system Controlesta RCO.
- **Controlesta RCO-view Basic training**
Introduction, operation and application of the BMS-Software Controlesta RCO-view.
- **Controlesta RCO-D Advanced Training**
Introduction, operation and application of the BACnet protocol as well as the integration of third parties via the system integrated protocols for the building automation system Controlesta RCO-D. Absorption of the Basic RCO-view training, special use of server and web part.


You can find more information about our trainings abilities on our website www.elesta.de.

BACnet-Logo and Certificate

Elesta's BACnet controllers are tested in a recognised BACnet® Testing Laboratory within the scope of product and conformity certification. As successfully tested products they are listed on the website of BACnet International (BI) and obtained the official BTL Mark as proof.



BACnet is a registered trademark of ASHRAE. ASHRAE does not endorse, approve or test products for compliance with ASHRAE standards. Compliance of listed products to the requirements of ASHRAE Standard 135 is the responsibility of BACnet International (BI). BTL is a registered trademark of BI.

 **ISO 9001:2008 Quality Management System**



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