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ELECTROMECHANICAL PRODUCTS

SINGLE AND TWO STAGE ROOM THERMOSTATS

DBET



TYPE	RANGE °C	STAGES	DIFF. IN THE STAGE K	DIFF. BETW. THE STAGES K	MAX. BULB TEMP. °C	
DBET-22	-30...+30	1	2...15		60	
DBET-22U	-30...+30	1	2...15		60	
DBET-22/2	-30...+30	2	1	2...5	60	
DBET-22/2U	-30...+30	2	1	2...5	60	
DBET-23	-30...+30	1	1		60	
DBET-23U	-30...+30	1	1		60	
DBET-26	0...+60	1	2...15		75	
DBET-26U	0...+60	1	2...15		75	
DBET-26/2	0...+60	2	1	2...5	75	
DBET-26/2U	0...+60	2	1	2...5	75	
DBET-27	0...+60	1	1		75	
DBET-27U	0...+60	1	1		75	

U models with knob under the cover

SINGLE AND TWO STAGE ROOM THERMOSTATS

ET



TYPE	RANGE 1 °C	RANGE 2 °C	DIFF. RANGE 1 K	DIFF. RANGE 2 K	MAX. BULB TEMP. °C	
ET060	0...+60		1.5±1		65	
ET060U	0...+60		1.5±1		65	
ET06060	0...+60	0...+60	1.5±1	1.5±1	65	
ET06060U	0...+60	0...+60	1.5±1	1.5±1	65	

U models with knob under the cover for range 1

BIMETALLIC ROOM THERMOSTATS

TA



TYPE	RANGE °C	DIFFERENTIAL K	FUNCTIONS	
TA31/I	+7...+30	<1	SPDT	
TA33/I	+7...+30	<1	SPDT+ON/OFF	
TA34/I	+7...+30	<1	S/W	



TYPE	RANGE °C	STAGES	DIFF. IN THE STAGES K	DIFF. BETW. STAGES K	MAX. BULB TEMP. °C	POCKET ON REQUEST
DBET-4	-30...+30	1	2...20		60	DBZ-01/02
DBET-4U	-30...+30	1	2...20		60	DBZ-01/02
DBET-4/2	-30...+30	2	1	2...5	60	DBZ-01/02
DBET-5	-30...+30	1	1		60	DBZ-01/02
DBET-5U	-30...+30	1	1		60	DBZ-01/02
DBET-6	-30...+30	1	FT		60	DBZ-01/02
DBET-7	0...+60	1	2...20		75	DBZ-01/02
DBET-7/2	0...+60	2	1	2...5	75	DBZ-01/02
DBET-8	0...+60	1	1		75	DBZ-01/02
DBET-16	+20...+90	1	2...20		100	DBZ-01/02
DBET-16U	+20...+90	1	2...20		100	DBZ-01/02
DBET-17	+20...+90	1	1		100	DBZ-01/02
DBET-18	+20...+90	1	ST		100	DBZ-01/02
DBET-10	+50...+120	1	2...20		150	DBZ-16/17
DBET-11	+50...+120	1	1		150	DBZ-16/17

Accessory	DBZ-01 - Brass pocket 120 mm, 12 x 1
	DBZ-02 - Stainless steel V2A pocket 120 mm, 12 x 1
	DBZ-16 - Brass pocket 120 mm, 10 x 0.5
	DBZ-17 - Stainless steel V2A pocket 120 mm, 10 x 0.5

U knob under the cover
FT manual minimal reset
ST manual maximum reset



TYPE	RANGE °C	DIFFERENTIAL K	MAX. BULB TEMP. °C	CAPILLARY LENGTH cm
TC060	0...+60	4±1	130	150
TC090	0...+90	4±1	130	150

Accessory	DBZ-30/14 - Brass pocket 120mm, 8 x 0.5
	DBZ-31/14 - Stainless steel V2A pocket 120mm, 8 x 0.5



TYPE	RANGE °C	DIFFERENTIAL K	MAX. BULB TEMP. °C	POCKET DIM. mm	
DBTV-1	-30...+30	2...20	60	120/Ø10	
DBTV-2U	-30...+30	1	60	120/Ø10	
DBTV-7	0...+60	2...20	75	120/Ø10	
DBTV-7U	0...+60	2...20	75	120/Ø10	
DBTV-8	0...+60	1	75	120/Ø10	
DBTV-8U	0...+60	1	75	120/Ø10	
DBTV-11	+50...+120	1	140	120/Ø10	
DBTV-16	+20...+90	2...20	100	120/Ø10	
DBTV-17	+20...+90	1	100	120/Ø10	
DBTV-17U	+20...+90	1	100	120/Ø10	
DBTV-18	+20...+90	ST	100	120/Ø10	
DBTV-18U	+20...+90	ST	100	120/Ø10	
Accessory	DBZ-16/14 - Brass pocket 120mm, 10 x 0.5				
	DBZ-17/14 - Stainless steel V2A pocket 120mm, 10 x 0.5				

Note: the thermostats are supplied with standard pocket model DBZ-16/14
U models with knob under the cover

SINGLE AND TWO STAGE BOILER THERMOSTATS



TYPE	RANGE 1 °C	RANGE 2 °C	DIFF. RANGE 1 K	DIFF. RANGE 2 K	MAX BULB TEMP. °C	FUN- CTIONS	
TV090	0...+90		4±1		120	TR	
TV090U	0...+90		4±1		120	TW	
TVR6585	+65...+85		20±5		125	STB	
TVR90110	+90...+110		20±5		125	STB	
TV09090U	0...+90	0...+90	4±1	4±1	120	TW + TW	
TV090UR85	0...+90	+65...+85	4±1	20±5	120	TW+ STB	
Accessory	DBZ-30/14 - Brass pocket 120mm, 10 x 0.5						
	DBZ-40/14 - Brass pocket 120mm, 16						
	DBZ-31/14 - Stainless steel V2A pocket 120mm, 10 x 0.5						
	DBZ-41/14 - Stainless steel V2A pocket 120mm, 16						

Note: the thermostats are supplied with standard pocket models DBZ-30/14 and DBZ-40/14
U models with knob under the cover
TR with SPDT contact
TW with knob under the cover, SPDT contact
STB with manual security reset, SPDT contact



TYPE	RANGE °C	STA- GES	DIFF. IN THE STA- GES K	DIFF. BETW. THE STAGES K	MAX. BULB TEMP. °C	SPRING DIM. mm
DBTZ-2U	-30...+30	1	1		60	200/Ø21
DBTZ-7	0...+60	1	2...20		75	200/Ø21
DBTZ-7/2	0...+60	2	1	2...5	75	200/Ø21
DBTZ-8	0...+60	1	1		75	200/Ø21
DBTZ-12U	+50...+120	1	ST		140	200/Ø21
Accessory	DBZ-25 - Spiral protection bracket for capillary					

Note: the thermostats are supplied with spiral protection bracket model DBZ-25
U models with knob under the cover
ST manual maximum reset



TYPE	RANGE °C	DIFFERENTIAL K	MAX BULB TEMP. °C	FUN- CTIONS
TZ090U	0...+90	4±1	120	TW
TZR6585	+65...+85	20±5	125	STB
Accessory	DBZ-25 - Spiral protection bracket for capillary			

Note: the thermostats are supplied with spiral protection bracket model DBZ-25
U models with knob under the cover
TW with knob under the cover, SPDT contact
STB with manual security reset, SPDT contact



TYPE	RANGE °C	DIFFERENTIAL K	MAX. TEMP. SENSIBLE ELEMENT °C
DBAT-3	0...+60	2...20	75
DBAT-3U	0...+60	2...20	75
DBAT-5	+20...+90	2...20	110
DBAT-5U	+20...+90	2...20	110

U models with knob under cover



TYPE	RANGE °C	DIFFERENTIAL K	MAX. TEMP. SENSIBLE ELEMENT °C
AT2090	+20...+90	8±3	90
AT2090U	+20...+90	8±3	90

U models with knob under cover



TYPE	RANGE	HYSTERESIS IN THE STAGE	RESET	PROTECTION	CAPILLARY LENGTH	
	°C	K			m	
TF30	-10...+10	2	auto	IP65	3	
TF30R	-10...+10	FT	man	IP65	3	
TF60	-10...+10	2	auto	IP65	6	
TF60R	-10...+10	FT	man	IP65	6	
TF18	-10...+10	2	auto	IP65	1.8	
TF18R	-10...+10	FT	man	IP65	1.8	
Accessory	DBZ-01 - Brass pocket 120mm, 12 x 1					
	DBZ-02 - Stainless steel pocket AISI 304 120mm, 12 x 1					
	DBZ-05 - Set of 6 mounting brackets for capillary of antifrost thermostats					

FT minimal manual reset





TYPE	CON- NECTION G	SETTING RANGE (*) l/min H ₂ O	MAX RECOMMEN- DED FLOW l/min H ₂ O	PRESSURE LOSS (Q max) bar	TOLERANCE ± % ES(**)
DB10MI	3/8"	5 - 6	10	0.01	15
DB15MI	1/2"	6 - 7	20	0.01	15
DB20MI	3/4"	7,5 - 11	40	0.01	15
DB20MI/1	3/4"	13 - 16	40	0.01	15
DB25MI	1"	19 - 24	60	0.01	15
DB32MI	1 1/4"	30 - 50	80	0.01	15
DB40MI	1 1/2"	50 - 60	100	0.01	15
DB50MI	2"	70 - 90	150	0.01	15

* adjustable range is indicated with decreasing flow on horizontal mounting.
 ** end of scale



TYPE	PIPE Ø	MAX . PRESSURE bar	NORMAL MEDIA (body in brass)	AGGRESSI- VE MEDIA (body in stainless steel AISI 316L)	BODY WITH PIPE FITTING	PRO- TEC- TION
SF1K	1...8"	11	•			IP65
SF1E*	1...8"	11	•			IP65
SF1RE	1...8"	11	•			IP65
SF2E*	1...8"	30		•		IP65
SF2RE	1...8"	30		•		IP65
SF3E	1/2"	11	•		•	IP65
SF4E	3/4"	11	•		•	IP65
SF6E	1"	11	•		•	IP65
Accessory	DBZ-09 - Stainless steel Aisi 316L paddles for liquid flow switch					

* models with TÜV approval

Notes: the flow switches are supplied with paddles model DBZ-09
 On request available 1" NPT connection version (product code "SFxx/NPT")



TYPE	MIN. CUT-OUT VALUE m/s	MIN. CUT-IN VALUE m/s	MAX. CUT-OUT VALUE m/s	MAX. CUT-IN VALUE m/s	MAX. AIR TEMP °C	PROTEC- TION
SL1E	1.0	2.5	8.0	9.2	85	IP65
Accessory	DBZ-08 - Stainless steel V2A paddle for air flow switch					

Note: the flow switches are supplied with paddles model DBZ-08

LEVEL SWITCHES

SQ



TYPE	DIFF. mm	MAX. PRESS. bar	MAX TEMP. °C	THREADED BODY 1"R	FLOAT	PROTECTION	
SQ01	10/14	11	85	brass	acrylic	IP65	

DUCT AND ROOM HYGROSTATS

DBKH, DBZH



DBKH

DBZH

TYPE	RANGE % r.h.	DIFFERENTIAL % r.h.	PROTECTION	
DBKH-10	30...100	5	IP65	
DBKH-10U	30...100	5	IP65	
DBZH-101	35...100	4	IP30	
DBZH-101U	35...100	4	IP30	

U models with knob under the cover

AIR DIFFERENTIAL PRESSURE SWITCHES

DBL



TYPE	RANGE mbar	DIFFERENTIAL mbar	MAX PRESSURE mbar	
DBL-205A	0.3...4.0	0.15 ± 15%	100	
DBL-205B	0.5...5.0	0.2 ± 15%	100	
DBL-205C	0.2...3.0	0.1 ± 15%	100	
DBL-205D	2...10	1.0 ± 15%	100	
DBL-205E	5...25	1.5 ± 15%	100	

Accessory	DBZ-06 - Connection set with 2 PVC duct connectors, 2 m flexible PVC pipe and 4 screws for differential pressure switches and transmitters	
	DBZ-14A - Set with mounting bracket and screws	
	DBZ-14B - Set with mounting bracket and screws	

MANOMETERS AND AIR DIFFERENTIAL PRESSURE SWITCHES

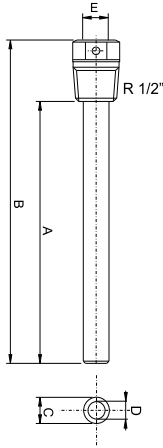
DB-M.../P...



TYPE	RANGE MANOMETER Pa	RANGE PRESSURE SWITCH Pa	DIFFERENTIAL Pa	MAX PRESSURE kPa	
DB-M6	0...600			200	
DB-M6P6	0...600	40...600	30	50	
DB-M10	0...1500			200	
DB-M10P13	0...1500	100...1300	80	50	
Accessory	RIC-MXPX - Liquid charger for DB-M...P...				



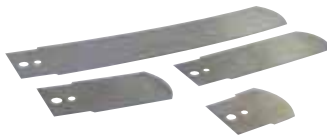
POCKETS FOR THERMOSTATS



TYPE	A	B	C	D	E	MATERIAL
DBZ-01*	120	140	11	10	15	brass/Cu Ni
DBZ-02*	120	148	12	10	15	stainless steel V2A
DBZ-16*	120	140	10	8.5	15	brass/Cu Ni
DBZ-16/14	120	140	10	8.5	15	brass/Cu Ni
DBZ-17*	120	148	10	8.5	15	stainless steel V2A
DBZ-17/14	120	148	10	8.5	15	stainless steel V2A
DBZ-18*	40	61	11	10	15	brass/Cu Ni
DBZ-19*	40	68	10	8.5	15	stainless steel V2A
DBZ-30/14	120	140	8	7	15	brass/Cu Ni
DBZ-31/14	120	148	9	7	15	stainless steel V2A
DBZ-40/14	100	128	16	15	15	brass/Cu Ni
DBZ-41/14	120	148	16	15	15	stainless steel V2A

* with stopper

ACCESSORIES



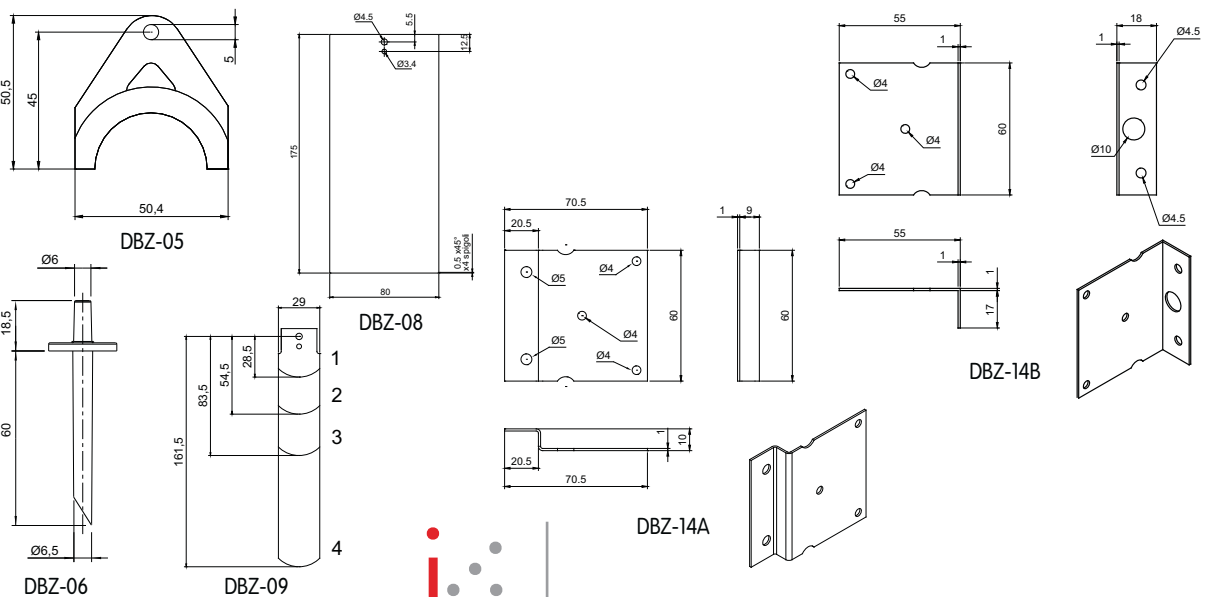
DBZ-09



RIC-MXPX

TYPE	DESCRIPTION
ATEX	ATEX certificate
DBZ-05	set of 6 mounting brackets for capillary of antifrost thermostats
DBZ-06	connection set with 2 PVC duct connectors, 2 m flexible PVC pipe and 4 screws for differential pressure switches and transmitters
DBZ-08	stainless steel V2A paddle for air flow switch
DBZ-09	stainless steel V4A paddles for liquid flow switch
DBZ-14A	set with mounting bracket and screws
DBZ-14B	set with mounting bracket and screws
DBZ-25	spiral protection bracket for capillary
EXL-IRU-1	remote converter signal accessory
RIC-MXPX	liquid charger for DB-M...P...

Note: the ATEX certificate is only supplied coupled module EXL-IRU-1 and for Industrie Technik products (only on request).



MOTORIZED VALVES

ELECTROTHERMAL ACTUATORS FOR MANIFOLDS

SE1C



TYPE	FORCE N	POWER SUPPLY Vac 50/60 Hz	ACTION	POWER CONSUMPTION VA	CHARACTERISTICS	
SE1C24	90	24	On-Off	3.0	running time 210 sec., stroke 3.5 mm, wax sensible element, M30 connector, 1 m cable, IP44	
SE1C230	90	230	On-Off	3.0		
SE1C24S	90	24	On-Off	3.0		
SE1C230S	90	230	On-Off	3.0		
Accessory	ADVEX - Adapter for SE1C/VFX coupling up to KVS 2,5 to allow the valve to be normally open on direct way					

S with 1 auxiliary microswitch 230 Vac, 3A





TYPE	WAYS	CON- NEC- TION	KVS m³/h		MAX. DIFF. PRESS. bar	CHARACTERI- STICS	
			DIRECT WAY	ANGLE WAY			
VFX210	2	G 1/2	0.25	-	2.5	body in forged brass PN 16, male thread connection, stroke 2.5 mm, normally closed on direct way, perfect sealing, max. fluid temperature +2...+95°C	
VFX211	2	G 1/2	0.4	-	2.5		
VFX212	2	G 1/2	0.6	-	2.5		
VFX213	2	G 1/2	1.0	-	2.5		
VFX214	2	G 1/2	1.6	-	2.5		
VFX235	2	G 3/4	2.5	-	2.5		
VFX237*	2	G 3/4	4.0	-	1.5		
VFX239*	2	G 3/4	6.0	-	1.5		
VFX310	3	G 1/2	0.25	0.25	2.5		
VFX311	3	G 1/2	0.4	0.4	2.5		
VFX312	3	G 1/2	0.6	0.6	2.5		
VFX313	3	G 1/2	1.0	0.8	2.5		
VFX314	3	G 1/2	1.6	1.0	2.5		
VFX335	3	G 3/4	2.5	1.6	2.5		
VFX337*	3	G 3/4	4.0	2.5	1.5		
VFX339*	3	G 3/4	6.0	4.0	1.5		
VFX410	3 (4 port)	G 1/2	0.25	0.25	2.5		* 140 N ac- tuator needed (product code "SEITP...")
VFX411	3 (4 port)	G 1/2	0.4	0.4	2.5		
VFX412	3 (4 port)	G 1/2	0.6	0.6	2.5		
VFX413	3 (4 port)	G 1/2	1.0	0.8	2.5		
VFX414	3 (4 port)	G 1/2	1.6	1.0	2.5		
VFX435	3 (4 port)	G 3/4	2.5	1.6	2.5		
VFX437*	3 (4 port)	G 3/4	4.0	2.5	1.5		
VFX439*	3 (4 port)	G 3/4	6.0	4.0	1.5		
Access- sory	VTP - Override control						
	ADVFX - Adapter for SEIC/VFX coupling up to KVS 2,5 to allow the valve to be normally open on direct way						



TYPE	FORCE	POWER SUPPLY Vac 50/60 Hz	ACTION	POWER CON- SUMPTION	CHARACTERI- STICS
	N			VA	
SEIT24	100	24	On-Off	3.0	running time 210 sec, stroke 2.5 mm, wax sensible element, M30 connector, 2 m cable, IP44
SEIT230	100	230	On-Off	3.0	
SEIT24S	100	24	On-Off	3.0	
SEIT230S	100	230	On-Off	3.0	
SEITP24	140	24	On-Off	3.0	
SEITP230	140	230	On-Off	3.0	
SEITP24S	140	24	On-Off	3.0	
SEITP230S	140	230	On-Off	3.0	
SEIM24	100	24	prop. 0...10 Vdc	3.5	
SEIMP24	140	24	prop. 0...10 Vdc	3.5	

S with 1 auxiliary microswitch, only for models SEIT and SEITP (On-Off)





TYPE	WAYS	CON-NEC-TION	KVS m³/h		MAX.DIFF. PRESS. bar	CHARACTERISTICS
			DIRECT WAY	ANGLE WAY		
VFT210	2	G 1/2	0.25	-	2.5	body in brass PN 16, male thread connection, stroke 4.5 mm, normally closed on direct way, perfect sealing, max. fluid temperature +2...+95°C
VFT211	2	G 1/2	0.4	-	2.5	
VFT212	2	G 1/2	0.6	-	2.5	
VFT213	2	G 1/2	1.0	-	2.5	
VFT214	2	G 1/2	1.6	-	2.5	
VFT215	2	G 1/2	2.5	-	2.5	
VFT235	2	G 3/4	2.5	-	2.5	
VFT237	2	G 3/4	4.0	-	1.5	
VFT239	2	G 3/4	6.0	-	1.5	
VFT310	3	G 1/2	0.25	0.25	2.5	
VFT311	3	G 1/2	0.4	0.4	2.5	
VFT312	3	G 1/2	0.6	0.6	2.5	
VFT313	3	G 1/2	1.0	0.8	2.5	
VFT314	3	G 1/2	1.6	1.0	2.5	
VFT315	3	G 1/2	2.5	1.6	2.5	
VFT335	3	G 3/4	2.5	1.6	2.5	
VFT337	3	G 3/4	4.0	2.5	1.5	
VFT339	3	G 3/4	6.0	4.0	1.5	
VFT410	3 (4 port)	G 1/2	0.25	0.25	2.5	
VFT411	3 (4 port)	G 1/2	0.4	0.4	2.5	
VFT412	3 (4 port)	G 1/2	0.6	0.6	2.5	
VFT413	3 (4 port)	G 1/2	1.0	0.8	2.5	
VFT414	3 (4 port)	G 1/2	1.6	1.0	2.5	
VFT415	3 (4 port)	G 1/2	2.5	1.6	2.5	
VFT435	3 (4 port)	G 3/4	2.5	1.6	2.5	
VFT437	3 (4 port)	G 3/4	4.0	2.5	1.5	
VFT439	3 (4 port)	G 3/4	6.0	4.0	1.5	
Accessory	VTP - Override control					



TYPE	FORCE N	POWER SUPPLY Vac 50/60 Hz	ACTION	POWER CON-SUMPTION VA	CHARACTERISTICS
SE2F24	200	24	On-Off, 3 point	5.5	running time about 81 sec., stroke 4,5 mm, M30 connector, 1,5 m cable, IP54
SE2F230	200	230	On-Off, 3 point	5.5	
SE2M24	200	24	proportional 0...10 Vdc	5.5	



TYPE	CONNECTION	KVS m³/h	MAX. DIFF. PRESS. bar	CHARACTERISTICS
2 VIE				body in brass PN 16, female connection, normally closed on direct way, max. fluid temp. +2...+94°C
DB-VZ2-15	G 1/2	1.5	2.5	
DB-VZ2-20	G 3/4	2.5	1.0	
DB-VZ2-25	G 1	4.8	0.6	
3 VIE				
DB-VZ3-15	G 1/2	1.5	2.5	
DB-VZ3-20	G 3/4	2.5	1.5	
DB-VZ3-25	G 1	4.8	0.6	



TYPE	AUX. SWITCH	POWER SUPPLY Vac	FREQUENCY Hz	POWER CONSUMP. VA	CHARACTERISTICS
SM24/CA	•	24	50/60	7	running time approx. 10 sec. by electric motor, 5 sec. by spring return, IP20
SM230/CA	•	230	50/60	7	



TYPE		CON- NECTION	KVS m³/h	MAX. DIFF. PRESS. bar *	CHARACTERI- STICS		
2 WAYS	3 WAYS						
VFZ210	VFZ310	G 1/2	0.25	2.5 (10.0)	cast iron G25 body, PN 16, female connection, brass plug, stainless steel stem, stroke 5,5 mm, fluid temp. -10...+120°C, glycol max 50% control flow characteristics linear, leakage: direct way perfect sealing, angle way 0,2% on KVs value, mixing or diverting		
VFZ211	VFZ311	G 1/2	0.4	2.5 (10.0)			
VFZ212	VFZ312	G 1/2	0.63	2.5 (10.0)			
VFZ213	VFZ313	G 1/2	1.0	2.5 (10.0)			
VFZ214	VFZ314	G 1/2	1.6	2.5 (10.0)			
VFZ215	VFZ315	G 1/2	2.5	2.5 (10.0)			
VFZ218	VFZ318	G 3/4	4.0	2.0 (5.0)			
VFZ220	VFZ320	G 3/4	6.3	2.0 (5.0)			
VFZ225	VFZ325	G 1	10.0	2.0 (2.5)			
VFZ232	VFZ332	G 1 1/4	13.0	2.0 (2.5)			
VFZ240	VFZ340	G 1 1/2	18.0	2.0 (2.0)			

* **dPmax** the values inside brackets are the max. differential pressure when the valve is fully closed
the values out of brackets are the suggested max. pressure drop (valve fully open)

ELECTRIC ACTUATORS FOR VFZ VALVES SERIES



TYPE	FORCE	POWER SUPPLY	ACTION	POWER CON- SUMP VA	CHARACTERISTICS		
	N	Vac 50/60 Hz					
SE4F24	400	24	On-Off, 3 point	5.0	running time about 70 sec, stroke 5,5 mm, 3/4 connector, 1,5 m cable, manual override, IP54		
SE4F230	400	230	On-Off, 3 point	7.0			
SE4M24	400	24	proportional, 0...10 Vdc 4...20 mA	5.5			

Note: on request available version with M30x1.5 ring connection instead of 3/4" (product code "SE4xxM30")



TYPE		CON- NEC- TION	KVS m ³ /h	MAX. DIFF. PRESS. bar *	CHARACTERISTICS		
2 WAYS	3 WAYS						
VFS215	VFS315	G 1/2	2.5	2.2 (11.0)	cast iron G25 body, PN 16, female connection, brass plug, stainless steel stem, stroke 16,5 mm, fluid temp. -10...+130°C, glycol max 50% control flow characteristics equal-percentage/linear, leakage: direct way perfect sealing, angle way 0,2% on KVs value, mixing or diverting		
VFS218	VFS318	G 3/4	4.0	2.2 (11.0)			
VFS220	VFS320	G 3/4	6.3	2.2 (11.0)			
VFS225	VFS325	G 1	10.0	2.2 (7.0)			
VFS232	VFS332	G 1 1/4	16.0	2.2 (4.4)			
VFS240	VFS340	G 1 1/2	25.0	2.2 (2.7)			
VFS250	VFS350	G 2	40.0	2.2 (2.2)			
VFS252	VFS352	G 2	30.0	2.2 (2.2)			

* **dPmax** the values inside brackets are the max. differential pressure when the valve is fully closed
the values out of brackets are the suggested max. pressure drop (valve fully open)



TYPE		CON- NEC- TION	KVS m ³ /h	MAX. DIFF. PRESS. bar *	CHARACTERISTICS		
2 WAYS	3 WAYS						
VFSF215	VFSF315	15	2.5	2.2 (11.0)	cast iron G25 body, PN 16, female connection, brass plug, stainless steel stem, stroke 16,5 mm, fluid temp. -10...+130°C, glycol max 50% control flow characteristics equal-percentage/linear, leakage: direct way 0...0,05% on KVs value, angle way 0...1% on KVs value, mixing or diverting		
VFSF220	VFSF320	20	6.3	2.2 (11.0)			
VFSF225	VFSF325	25	10.0	2.2 (7.0)			
VFSF232	VFSF332	32	16.0	2.2 (4.4)			
VFSF240	VFSF340	40	25.0	2.2 (2.7)			
VFSF250	VFSF350	50	40.0	2.2 (2.2)			

* **dPmax** the values inside brackets are the max. differential pressure when the valve is fully closed
the values out of brackets are the suggested max. pressure drop (valve fully open)



TYPE		DN	KVS	MAX. DIFF. PRESS. bar *	CHARACTERISTICS
2 WAYS	3 WAYS	mm	m³/h		
VFF265	VFF365	65	63	1.5 (1.8)	cast iron G25 body, PN16, stroke 16,5 mm, fluid temp. - 10...+130 °C, glycol max 50% control flow charact. equal-percentage/linear, leakage: direct way 0...0,05 on KVs value, angle way 0...1% on KVs value, mixing or diverting

* **dPmax** the values inside brackets are the max. differential pressure when the valve is fully closed the values out of brackets are the suggested max. pressure drop (valve fully open)



TYPE	FORCE N	POWER SUPPLY Vac 50/60 Hz	ACTION	POWER CONSUMP. VA	CHARACTERISTICS
SE6F24	600	24	On-Off, 3 point	5.0	running time about 80 sec., stroke 16,5 mm, manual override, self-adjusting (only SE6M24), position indicator, IP 54
SE6F24S	600	24	On-Off, 3 point	5.0	
SE6F230	600	230	On-Off, 3 point	8.0	
SE6F230S	600	230	On-Off, 3 point	8.0	
SE6M24	600	24	proportional, 0...10 Vdc 4-20 mA	6.0	
Accessory	ADV1 - Adapter for 2S and 3S valves series Industrietechnik (gray body, obsolete models) ADV2 - Adapter for 2S- and 3S- valves series Industrietechnik (black body, obsolete models) ADV3 - Adapter for VMB/VSB valves series Controlli				

S with 2 auxiliary microswitches 230 Vac 3A (not for model SE6M24)



TYPE		DN	KVS	STROKE	MAX. DIFF. PRESS. bar *		CHARACTERISTICS		
2 WAYS	3 WAYS	mm	m³/h	mm	DB-DA71	DB-DA72			
VFF280	VFF380	80	100	41	2.0 (5.0)	2.0 (8.0)	body in cast iron G25, PN 16, stainless steel stem, fluid temp. -10...+130°C, glycol max 50%, control flow charact. equal-percentage/linear leakage: direct way 0...0,05% on KVs value, angle way 0...1% on KVs value, mixing or diverting		
VFF2100	VFF3100	100	145	41	2.0 (3.2)	2.0 (5.0)			
2F-125	3F-125	125	220	41	2.0 (2.0)	2.0 (3.2)			
2F-150	3F-150	150	320	41	1.4 (1.4)	2.0 (2.2)			
2F-200	3F-200	200	550	42	0.8 (0.8)	1.2 (1.2)			

* **dPmax** the values inside brackets are the max. differential pressure when the valve is fully closed
the values out of brackets are the suggested max. pressure drop (valve fully open)

ELECTRIC ACTUATORS FOR VFFx80/VFFx100/2F/3F VALVES SERIES



TYPE	FORCE N	POWER SUPPLY Vac	ACTION	POWER CON-SUMP. VA	CHARACTERISTICS	
DB-DA71F*	2500	24	2 / 3 point (floating)	10	stroke time: - DB-DA71 50 Hz: 4.6 sec/mm, 60 Hz: 3.8 sec/mm, - DB-DA72 50 Hz: 8.3 sec/mm, 60 Hz: 6.9 sec/mm manual override, IP 40	
DB-DA71M	2500	24	0...10 Vdc 4...20 mA	12		
DB-DA72F-S2*	4000	24	2 / 3 point (floating)	10		
DB-DA72M	4000	24	0...10 Vdc 4...20 mA	12		
AMV5	Service coupling valve actuator					
Accessory	KIT-DA7X - assembly kit for actuators DB-DA7x					

Notes: the actuators are supplied with assembly kit model KIT-DA7X

* On request available 230 Vac version (product code "DB-DA7xF-S2/230")



TYPE	DN mm	KVS m³/h	MAX. DIFF. PRESS. bar	ACTUATOR	CHARACTERISTICS
VF32	32	40	12	DAL..	cast iron body, PN 16, stainless steel shaft, nodular iron butterfly, fluid temperature -15...+90 °C, manual override, adaptor for direct mounting on actuator
VF40	40	50	12	DAL..	
VF50	50	99	10	DAL..	
VF65	65	170	8	DAL..	
VF80	80	261	8	DAG..	
Accessory	KIT-VF32/80 - assembly kit for butterfly valves VF				

Note: the valves are supplied with assembly kit model KIT-VF32/80

ELECTRIC ACTUATORS FOR VF VALVES SERIES



TYPE	TORQUE Nm	TIMING sec.	POWER SUPPLY Vac	ACTION	CHARACTERISTICS
DAL24S	24	125	24	2 / 3 point	bi-directional actuator, manual override, 2 SPDT auxiliary adjustable switches, selectable rotation direction, IP44 or IP54 with cable glands
DAL230S	24	125	230	2 / 3 point	
DML24	24	125	24	0...10 Vdc 4...20 mA	
DAG24S	32	140	24	2 / 3 point	
DAG230S	32	140	230	2 / 3 point	
DMG24	32	140	24	0...10 Vdc 4...20 mA	

ACCESSORIES



ADV1



HEATER1



KIT-DA7X



KIT-VF32/80



VTP

TYPE	DESCRIPTION
ADV1	adapter for 2S and 3S valves series Industrietechnik (gray body, obsolete models)
ADV2	adapter for 2S- and 3S- valves series Industrietechnik (black body, obsolete models)
ADV3	adapter for VMB/VSB valves series Controlli
ADVFX	adapter for SE1C/VFX coupling up to KVS 2,5 to allow the valve to be normally open on direct way
KIT-DA7X	assembly kit for actuators DB-DA7x
KIT-VF32/80	assembly kit for butterfly valves VF
HEATER1	heater for stem valves series VFS and VFFS
VTP	override control for valves VFX-VFT

DAMPER ACTUATORS

DAMPER ACTUATORS



TYPE	TORQUE Nm	DAMPER AREA m ²	RUNNING TIME sec.	POWER SUPPLY	AUX. SWITCHES	ACTION		
						floating	proportional Vdc	proportional mA
DAK24	2	0.5	25...35	24 Vac/dc		2-3 p.		
DAK24S	2	0.5	25...35	24 Vac/dc	•	2-3 p.		
DAK230	2	0.5	25...35	230 Vac		2-3 p.		
DAK230S	2	0.5	25...35	230 Vac	•	2-3 p.		
DMK24	2	0.5	80...110	24 Vac/dc			0...10	
DAN24	4	1	35	24 Vac/dc		2-3 p.		
DAN24S	4	1	35	24 Vac/dc	•	2-3 p.		
DAN230	4	1	35	230 Vac		2-3 p.		
DAN230S	4	1	35	230 Vac	•	2-3 p.		
DMN24	4	1	35	24 Vac/dc			0 (2)...10	
DAS24	8	2	30	24 Vac/dc		2-3 p.		
DAS24S	8	2	30	24 Vac/dc	•	2-3 p.		
DAS230	8	2	30	230 Vac		2-3 p.		
DAS230S	8	2	30	230 Vac	•	2-3 p.		
DMS24	8	2	30	24 Vac/dc			0(2)...10	0(4)...20
DMS24S	8	2	30	24 Vac/dc	•		0(2)...10	0(4)...20
DMS230	8	2	30	230 Vac			0(2)...10	
DMS230S	8	2	30	230 Vac	•		0(2)...10	
DA24	16	4	80	24 Vac/dc		2-3 p.		
DA24S	16	4	80	24 Vac/dc	•	2-3 p.		
DA230	16	4	80	230 Vac		2-3 p.		
DA230S	16	4	80	230 Vac	•	2-3 p.		
DM24	16	4	80	24 Vac/dc			0(2)...10	0(4)...20
DM24S	16	4	80	24 Vac/dc	•		0(2)...10	0(4)...20
DM230	16	4	80	230 Vac			0(2)...10	
DM230S	16	4	80	230 Vac	•		0(2)...10	
DAL24	24	6	125	24 Vac/dc		2-3 p.		
DAL24S	24	6	125	24 Vac/dc	•	2-3 p.		
DAL230	24	6	125	230 Vac		2-3 p.		
DAL230S	24	6	125	230 Vac	•	2-3 p.		
DML24	24	6	125	24 Vac/dc			0(2)...10	0(4)...20
DML24S	24	6	125	24 Vac/dc	•		0(2)...10	0(4)...20
DML230	24	6	125	230 Vac			0(2)...10	
DML230S	24	6	125	230 Vac	•		0(2)...10	
DAG24	32	6	160	24 Vac/dc		2-3 p.		
DAG24S	32	6	160	24 Vac/dc	•	2-3 p.		
DAG230	32	6	160	230 Vac		2-3 p.		
DAG230S	32	6	160	230 Vac	•	2-3 p.		
DMG24	32	6	240	24 Vac/dc			0(2)...10	0(4)...20
DMG24S	32	6	240	24 Vac/dc	•		0(2)...10	0(4)...20





TYPE	TORQUE Nm	DAMPER AREA m ²	RUNNING TIME sec.	POWER SUPPLY	AUX. SWITCHES	ACTION		
						floating	proportional Vdc	proportional mA
MODELS WITH SPRING RETURN								
DAN24F	5	1	50...70	24 Vac/dc		2 p.		
DAN24FS	5	1	50...70	24 Vac/dc	•	2 p.		
DAN230F	5	1	50...70	230 Vac		2 p.		
DAN230FS	5	1	50...70	230 Vac	•	2 p.		
DAT24F	10	2	75	24 Vac/dc		2 p.		
DAT24FS	10	2	75	24 Vac/dc	•	2 p.		
DAT230F	10	2	75	230 Vac		2 p.		
DAT230FS	10	2	75	230 Vac	•	2 p.		
DB-DA24F	15	3	150	24 Vac/dc		2 p.		
DB-DA24F-S2	15	3	150	24 Vac/dc	•	2 p.		
DB-DA230F	15	3	150	230 Vac		2 p.		
DB-DA230F-S2	15	3	150	230 Vac	•	2 p.		
DB-DM24F	15	3	150	24 Vac/dc			0...10	
MODELS FOR FIRE DAMPERS								
AF24SE	5	1	50...70	24 Vac/dc	•	2 p.		
AF230SE	5	1	50...70	230 Vac	•	2 p.		
NF24SE	8	1.5	75...95	24 Vac/dc	•	2 p.		
NF230SE	8	1.5	75...95	230 Vac	•	2 p.		
DB-SF1.90/12	20	3	150	24 Vac/dc	•	2 p.		
DB-SF2.90/12	20	3	150	230 Vac	•	2 p.		
DB-SF1.90T/12	20	3	150	24 Vac/dc	•	2 p.		
DB-SF2.90T/12	20	3	150	230 Vac	•	2 p.		
DB-SF1.90TA/12	20	3	150	24 Vac/dc	•	2 p.		
DB-SF2.90TA/12	20	3	150	230 Vac	•	2 p.		

POSITION TRANSDUCER

DB-P



TYPE	MOUNTING	POWER SUPPLY	OUTPUT
DB-PA	wall-mounted	24 Vac/dc	0(2)...10 Vdc
DB-PF	front-end mounted	24 Vac/dc	0(2)...10 Vdc
DB-PA5	wall-mounted	24 Vac/dc	0...5 Vdc
DB-PF5	front-end mounted	24 Vac/dc	0...5 Vdc



DBTA-343-199



DBTA-363-436

RANGE +5...+30°C DB-TA-		Pipe	OUTPUTS		SWITCHES			Remote S/W	Remote sensor	Power supply
			Relay	0... 10 Vdc	On/Off	3 speed	S/W			
323-	199	2	•		•			B	24/230 Vac	
	435	2	•		▲	•	•	A		
	995	2	•				•	B		
	998	2	•				•	B		
335-	933	2/4		•/••		•	•/zn	B	24 Vac	
	993	2/4		•/••			•/zn			
343-	139	4	••		•	•	zn	B	24/230 Vac	
	199	4	••		•		zn			
	999	4	••				zn			
345-	139	4		••	•	•	zn	B	24 Vac	
	199	4		••	•		zn			
	999	4		••			zn			
347-	439	4		3 point control	▲	•	zn	A	24 Vac	
363-	436	2	•		▲	•	auto	A	230 Vac	
367-	439	2		3 point control	▲	•	zn	A	24 Vac	
383-	433	2/4	•		▲	•	•	A	24/230 Vac	
387-	10A	2/4	•••••		•	m/a	auto	A	230 Vac	
	566	4	•••••		~	m/a	zn	A		
	866	2	•••••		~	m/a	auto	A		

INDEX FOR MODELS DB-TA-3:

- zn** dead zone
- ▲** continuous fan/thermostatic fan/off switch
- auto** s/w change over with water sensor
- ~** on/off/electric heater switch
- m/a** min speed/automatic speed switch
- A** sensor NTA010-623 (NTC 10K)
- B** sensor NTB010-623 (NTC 100K)





DBTA-33A-13A



DBTA-393-433



DBTA-3A3-700



DBTA-3C3-199

INDEX FOR MODELS DB-TA-3:

- Vct** continuous fan/thermostatic fan
- zn** dead zone
- proportional-integral action with autotuning function
- ▲** continuous fan/thermostatic fan/off switch
- auto** s/w change-over with water sensor
- heat** heating
- par** setting by keys and display
- A** sensor NTA010-623 (NTC 10K)
- ❖** ECONOMY version: replace last number of code with "A"
- ▶** only for ECONOMY version

RANGE +5...+30°C DB-TA-		Pipe	OUTPUTS		SWITCHES			Remote S/W	Economy	Remote sensor	Power supply
			Relay	0...10 Vdc	On/Off	3 speed	S/W				
31A-	100	2/4		□	•		•			AA	24 Vac
	110	2/4		□	•					AA	24 Vac
33A-	10A	2/4		□	•		par	•	❖	A	24 Vac
	13A	2/4		□	•	•	par	•	❖	A	
393-	435	2/4	•		▲	•	•			A	230 Vac
	436	2	•		▲	•		•		A	230 Vac
3A3-	000	4	••••				zn		❖	A	230 Vac
	139	4	••		•	•	zn		❖		
	199	4	••		•		zn		❖		
	700	4	••••			•Vct	zn				
	939	4	••			•	zn		❖		
	999	4	••				zn		❖		
3A5-	000	4		••			zn		❖	-	24 Vac
	100	4		••	•		zn		❖		
	130	4		••	•	•	zn		❖		
3A8-	000	4	• heating	••			zn		❖	-	24 Vac
	100	4	• heating	••	•		zn		❖		
	130	4	• heating	••	•	•	zn		❖		
3A9-	000	4	•	•			zn		❖	-	24 Vac
	100	4	•	•	•		zn		❖		
	130	4	•	•	•	•	zn		❖		
3B5-	000	2		•			par	▶	❖	-	24 Vac
	100	2		•	•		par	▶	❖		
	130	2		•	•	•	par	▶	❖		
3B8-	100	2	•	•	•		par	▶	❖	-	24 Vac
	130	2	•	•	•	•	par	▶	❖		
3C3-	139	2	••		•	•	par		❖	A	230 Vac
	199	2	••		•		par		❖		
	999	2	••				par		❖		
3D3-	00A	2	••••		on/off/res (par)	out/conf1/conf2/ conf3 (par)	par	par		A	230 Vac
		4				auto			❖		
3E3-	139	2	• (cooling)		•	•			❖	A	230 Vac
	199	2	• (cooling)		•				❖		
3F3-	139	2	•		•	•			❖	A	230 Vac
	199	2	•		•				❖		
	939	2	•			•			❖		
	999	2	•						❖		
3G3-	700	2/4	3 point control			•Vct	par			A	230 Vac





TYPE	RANGE	STAGES	DIFF. IN THE STAGE	DIFF. BETW. THE STAGES	INPUT
DB-I1D/1	-10...+40 °C	1	0.5...6 K		NTC 10K
DB-I1D/2	+30...+80 °C	1	0.5...6 K		NTC 10K
DB-I2D/1	-10...+40 °C	2	0.5...6 K	0.5...6 K	NTC 10K
DB-I2D/2	+30...+80 °C	2	0.5...6 K	0.5...6 K	NTC 10K
DB-I4D/02/001	-50...+110 °C	4	0...10 K	0.5...6 K	NTC 10K
DB-I4D/02/002	0...100 % r.h.	4	0...100 % r.h.	0.5...6 % r.h.	4...20 mA
DB-I4D/02/003	-50...+110 °C 0...100 %r.h.	4	0...10 K 0...10 % r.h.	0.5...6 K 0.5...6 % r.h.	NTC 10K 4...20 mA
DB-I4D/02/004	-50...+110 °C	8	0...10 K	0.5...6 K	NTC 10K



TYPE	RANGE °C	DIFFERENTIAL K	SET POINT (ΔT) °C	SENSOR
DB-IDD	-10...+85	0.5...6	0...+20	NTC 10K

Completo di 2 sonde con cavo di 2 m.



TYPE	ON/OFF	3 SPEEDS	POTENZIOMETER	SENSOR
DB-CDP/N1			analog 10k	NTC 10k
DB-CDP/N2	•	•	analog 10k	NTC 10k



TYPE	RANGE	POWER SUPPLY	OUTPUT	DIFFERENTIAL	RESOLUTION	INPUT	
DTR11N7	-40...+105 °C	230 Vac	10 A/250 Vac	0,1...99 K	0.1 - 1 °C	NTC 10K	

MULTIFUNCTION DDC CONTROLLER



EASY/1

Free output configuration with possibility of preloaded configuration.
 Fitted with 7 segments display.
 Controller is supplied with 230/12Vac transformer.
 RS485 interface with MODBUS RTU protocol.
 Controller can be connected to remote graphic display PWGRAPH.

Start/stop possibility by remote digital contact.
 Maximum configuration:
 4 AI
 5 DI
 2 AO
 6 DO

Controller can be configured by push-buttons on display or by EASYKIT tool



EASY/2

TYPE	DESCRIPTION	
EASY/1	Multifunction universal DDC controller DIN rail mounting	
EASY/2	Multifunction universal DDC controller panel mounting	
PWCONF	Factory configuration setting of EASY controller	
EASYKIT	USB/Serial converter	
	PWSER - Communication module RS485	
	PW1485 - Interface for RS485 communication, one output	
	Configuration software CD	



DB-R	INPUT 1			INPUT 2			X	1
	X	X	XX	X	X	XX		
INPUT 1								
NTC 10K	1	1	07 *					
PT 1000	2	1	08 *					
PTC 2K	3	1	09 *					
Ni 1000	4	1	10 *					
0...1000 ohm (DBKH-44)	5	2	06 *					
0...1 Vdc	6							
0...10 Vdc	7							
0...20 mA	8							
4...20 mA	9							
UNIT 1								
°C		1						
% u.r.		2						
bar		3						
mbar		4						
Pa		5						
RANGE 1								
0...+50 °C			01					
-30...+50 °C			02					
-10...+40 °C			03					
0...+100 °C			04					
-20...+80 °C			05					
0...100% u.r.			06					
-50...+110 °C			07					
-60...+600 °C			08					
-50...+150 °C			09					
-60...+200 °C			10					
Range on request (to specify)			99					
INPUT 2								
None			0	0		00 *		
NTC 10K			1	1		07 *		
PT 1000			2	1		08 *		
PTC 2K			3	1		09 *		
Ni 1000			4	1		10 *		
0...1000 ohm (DBKH-44)			5	2		06 *		
0...1 Vdc			6					
0...10 Vdc			7					
0...20 mA			8					
4...20 mA			9					
UNIT 2								
None				0				
°C				1				
% u.r.				2				
bar				3				
mbar				4				
Pa				5				
RANGE 2								
None						00		
0...+50 °C						01		
-30...+50 °C						02		
-10...+40 °C						03		
0...+100 °C						04		
-20...+80 °C						05		
0...100% u.r.						06		
-50...+110 °C						07		
-60...+600 °C						08		
-50...+150 °C						09		
-60...+200 °C						10		
Range on request (to specify)						99		
POWER SUPPLY								
230 Vac ± 10 %, 50/60 Hz							1	
12 Vac ± 10 %, 50/60 Hz							2	
OUTPUT								
2 SPDT relay 230Vac 8A								

* obligatory ranges





	INPUT 1			INPUT 2				
	X	X	XX	X	X	XX	X	2
DB-R								
INPUT 1								
NTC 10K	1	1	07 *					
0...10 Vdc	7							
4...20 mA	9							
UNIT 1								
°C		1						
% u.r.		2						
bar		3						
mbar		4						
Pa		5						
RANGE 1								
0...+50 °C			01					
-30...+50 °C			02					
-10...+40 °C			03					
0...+100 °C			04					
-20...+80 °C			05					
0...100% u.r.			06					
-50...+110 °C			07					
-60...+600 °C			08					
-50...+150 °C			09					
-60...+200 °C			10					
Range on request (to specify)			99					
INPUT 2								
None				0	0	00 *		
NTC 10K				1	1	07 *		
0...10 Vdc				7				
4...20 mA				9				
UNIT 2								
None					0			
°C					1			
% u.r.					2			
bar					3			
mbar					4			
Pa					5			
RANGE 2								
None						00		
0...+50 °C						01		
-30...+50 °C						02		
-10...+40 °C						03		
0...+100 °C						04		
-20...+80 °C						05		
0...100% u.r.						06		
-50...+110 °C						07		
-60...+600 °C						08		
-50...+150 °C						09		
-60...+200 °C						10		
Range on request (to specify)						99		
POWER SUPPLY								
230 Vac ± 10% 50/60 Hz							1	
12 Vac ± 10% 50/60 Hz							2	
OUTPUT TYPE								
2 proportional 0-10 Vdc								

* obligatory ranges





	INPUT 1			INPUT 2				
DB-R	X	X	XX	X	X	XX	X	3
INPUT 1								
NTC 10K	1	1	07 *					
0...10 Vdc	7							
4...20 mA	9							
UNIT 1								
°C	1							
% u.r.	2							
bar	3							
mbar	4							
Pa	5							
RANGE 1								
0...+50°C			01					
-30...+50°C			02					
-10...+40°C			03					
0...+100°C			04					
-20...+80°C			05					
0...100% u.r.			06					
-50...+110°C			07					
-60...+600°C			08					
-50...+150°C			09					
-60...+200°C			10					
Range on request (to specify)			99					
INPUT 2								
None				0	0	00 *		
NTC 10K				1	1	07 *		
PT 1000				2	1	08 *		
PTC 2K				3	1	09 *		
Ni 1000				4	1	10 *		
0...1000 ohm (DBKH-44)				5	2	06 *		
0...1 Vdc				6				
0...10 Vdc				7				
0...20 mA				8				
4...20 mA				9				
UNIT 2								
None						0		
°C						1		
% u.r.						2		
bar						3		
mbar						4		
Pa						5		
RANGE 2								
None							00	
0...+50 °C							01	
-30...+50 °C							02	
-10...+40 °C							03	
0...+100 °C							04	
-20...+80 °C							05	
0...100% u.r.							06	
-50...+110 °C							07	
-60...+600 °C							08	
-50...+150 °C							09	
-60...+200 °C							10	
Range on request (to specify)							99	
POWER SUPPLY								
230 Vac ± 10% 50/60 Hz								1
12 Vac ± 10% 50/60 Hz								2
OUTPUT TYPE								
1 proportional 0-10 Vdc and 1 SPDT relay 230 Vac 8 A								

INGRESSO 2 only in addition with input 1. If the input 2 is different from "none", then the input 1 works with proportional output, input 2 works with the relay output. If only one sensor is used for both the output, use the sensor.

* obligatory range



POWER PRODUCTS

POWER CONTROLLERS

PW...



PWN



PWM



PWK



PWQ



PWG

TYPE	DESCRIPTION	
CONTROLLER PWN		
PWN2XXV	12 Vac/dc LED from the front, version INTRABUS	
PWN5XXV	12 Vac/dc LED from the front, version CANBUS	
CONTROLLER PWM		
PWM2XXV	12 Vac/dc LED, 4 DIN modules, version INTRABUS	
PWM3XXV	12 Vac/dc without display, 4 DIN modules, version INTRABUS	
PWM5XXV	12 Vac/dc LED, 4 DIN modules, version CANBUS	
PWM6XXV	12 Vac/dc without display, 4 DIN modules, version CANBUS	
CONTROLLER PWK		
PWK1XXV	24 Vac/dc LCD, 4x20, 10 DIN modules, version INTRABUS	
PWK3XXV	24 Vac/dc without display, 10 DIN modules, version INTRABUS	
PWK4XXV	24 Vac/dc LCD, 4x20, 10 DIN modules, version CANBUS	
PWK6XXV	24 Vac/dc without display, 10 DIN modules, version CANBUS	
CONTROLLER PWQ		
PWQ4XXV	24 Vac/dc LCD, 4x20, 14 DIN modules, version CANBUS	
PWQ6XXV	24 Vac/dc without display, 14 DIN modules, version CANBUS	
CONTROLLER PWG		
PWG4XXV	24 Vac/dc LCD, 4x20, 14 DIN modules, version CANBUS	
PWG6XXV	24 Vac/dc without display, 14 DIN modules, version CANBUS	

EXPANSIONS POWER

PWE...



PWEM



PWEK



PWEQ



PWEG

TYPE	DESCRIPTION	
EXPANSION MODULES PWEM		
PWEM3V	12 Vac/dc without display, 4 DIN modules, version INTRABUS	
PWEM6V	12 Vac/dc without display, 4 DIN modules, version CANBUS	
EXPANSION MODULES PWEK		
PWEK3V	24 Vac/dc without display, 10 DIN modules, version INTRABUS	
PWEK6V	24 Vac/dc without display, 10 DIN modules, version CANBUS	
EXPANSION MODULES PWEQ		
PWEQ6	24 Vac/dc without display, 14 DIN modules, version CANBUS	
EXPANSION MODULES PWEG		
PWEG6	24 Vac/dc without display, 14 DIN modules, version CANBUS	



ACCESSORY POWER



EASYKIT



PWGRAPH

PWTOUCH



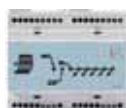
PWWALL



PWSER



PW1485



PW5485



PWMTR



ITPVC

TYPE	DESCRIPTION	NOTE	
PWGRAPH	Graphic display W/B lcd, visible area 57x30 mm, res. 128x64, 6 push-buttons, CANBUS	For wall/panel mounting (B1506) 130x115 mm	
PWTOUCH	Graphic display W/B lcd touch screen, visible area 81x48 mm, res. 240x140, 6 push-buttons, CANBUS	For wall/panel mounting (B1506) 130x115 mm	
PWWALL	Remote terminal with LED display, 4 digits, 4 buttons, INTRABUS	For wall mounting 120x70 mm	
PWSER	Communication module RS485 controllers series PWN, PWM, PWK	INPUT TTL	
PW1485	Interface for connection 1 line RS485 to 1 line RS232	4 DIN modules	
PW5485	Interface for connection 5 lines RS485 to 1 line RS232	8 DIN modules	
PWMTR	Transformer 230/12 Vac 5,6 VA	For PWN - PWM	
ITPVC	<p>Prime Virtual Control PC for supervisor system Very compact dimensions H 264 x L 112 x P 230</p>	With licensed Windows and Supervisor System already installed.	
	Accessories on request to pay: monitor, mouse and keyboard		

REMOTE SETPOINT CONTROLLER



PWCDP

PWCDP/N2

TYPE	ON/OFF	3 SPEED	POTENTIOMETER	SENSOR	
PWCDP			analog from 10 to 11 k	NTC 10k	
PWCDP/N2	•	•	analog from 10 to 11 k	NTC 10k	

SENSORS AND TRANSMITTERS

DIN HEAD TEMPERATURE SENSORS

DPTD



TYPE	SENSOR	POCKET SIZE	MEASURING RANGE °C	
DPTD/20	PT 100	ø 10 x 200 mm	-50...+600	
DPTD1/20	PT 1000	ø 10 x 200 mm	-50...+600	

ROOM TEMPERATURE SENSORS

DTB



TYPE	SENSORS	MEASURING RANGE °C	PROTECTION	
DTB/NTC	NTC 10K	-20...+60	IP30	
DTB/10K3	NTC 10K3A1	-20...+60	IP30	
DTB/1K8	NTC 1K8	-20...+60	IP30	
DTB/NTC100	NTC 100K	-20...+60	IP30	
DTB/PT	PT 100	-20...+60	IP30	
DTB/PTI	PT 1000	-20...+60	IP30	
DTB/Ni	Ni 1000	-20...+60	IP30	

CABLE TEMPERATURE SENSORS

NI, NT, PT



TYPE	SENSORS	SIZE	MEASURING RANGE °C	PROTECTION	
NTA003-040	NTC 10K	ø 6 x 40 mm x 0.30 m	-50...+110	IP67	
NTA020-040	NTC 10K	ø 6 x 40 mm x 2.00 m	-50...+110	IP67	
NTA060-040	NTC 10K	ø 6 x 40 mm x 6.00 m	-50...+110	IP67	
NTA010-623	NTC 10K	ø 6 x 23 mm x 1.00 m	-40...+80	IP67	
NTA020-623	NTC 10K	ø 6 x 23 mm x 2.00 m	-40...+80	IP67	
NTA060-623	NTC 10K	ø 6 x 23 mm x 6.00 m	-40...+80	IP67	
NTB020-623	NTC 100K	ø 6 x 23 mm x 2.00 m	-40...+80	IP67	
PTA010-100	PT 100	ø 6 x 100 mm x 1.00 m	-50...+200	IP67	
PTA020-100	PT 100	ø 6 x 100 mm x 2.00 m	-50...+200	IP67	
PTA010-100C	PT 100	ø 6 x 100 mm x 1.00 m	-50...+350 (*)	IP44	
PTA020-100C	PT 100	ø 6 x 100 mm x 2.00 m	-50...+350 (*)	IP44	
PTB010-100	PT 1000	ø 6 x 100 mm x 1.00 m	-50...+200	IP67	
PTB020-100	PT 1000	ø 6 x 100 mm x 2.00 m	-50...+200	IP67	
PTB010-100C	PT 1000	ø 6 x 100 mm x 1.00 m	-50...+350 (*)	IP44	
PTB020-100C	PT 1000	ø 6 x 100 mm x 2.00 m	-50...+350 (*)	IP44	
NTA020-620BR-J	NTC10K	strap-on sensor for pipes up to 2", contact zone 6x20 mm, cable length 2m, strap extension included	-50...+120	IP67	

(*) max capsule temperature -50...+600 °C
max cable temperature in glass fibre -50...+350 °C





STI



STC



STExx



STE11

TYPE	SENSOR	SIZE TUBE/POCKET mm	MEASURING RANGE °C	PRO- TEC- TION	APPLICATION	
STI11	NTC 10K	ø 8 x 120	-20...+110	IP65	immersion	
STI12	NTC 100K	ø 8 x 120	-20...+120	IP65	immersion	
STI13	NTC 1K8	ø 8 x 120	-20...+120	IP65	immersion	
STI14	NTC 10K3A1	ø 8 x 120	-20...+120	IP65	immersion	
STI15	NTC 10K4A1	ø 8 x 120	-20...+120	IP65	immersion	
STI21	PT 100	ø 8 x 120	-20...+120	IP65	immersion	
STI22	PT 1000	ø 8 x 120	-20...+120	IP65	immersion	
STI31	NI 1000	ø 8 x 120	-20...+120	IP65	immersion	
STC11	NTC 10K	ø 6 x 200	-20...+80	IP65	air duct	
STC12	NTC 100K	ø 6 x 200	-20...+80	IP65	air duct	
STC13	NTC 1K8	ø 6 x 200	-20...+80	IP65	air duct	
STC14	NTC 10K3A1	ø 6 x 200	-20...+80	IP65	air duct	
STC15	NTC 10K4A1	ø 6 x 200	-20...+80	IP65	air duct	
STC21	PT 100	ø 6 x 200	-20...+80	IP65	air duct	
STC22	PT 1000	ø 6 x 200	-20...+80	IP65	air duct	
STC31	NI 1000	ø 6 x 200	-20...+80	IP65	air duct	
STE11	NTC 10K		-20...+70	IP65	outdoor	
STE12	NTC 100K		-20...+70	IP65	outdoor	
STE13	NTC 1K8		-20...+70	IP65	outdoor	
STE14	NTC 10K3A1		-20...+70	IP65	outdoor	
STE15	NTC 10K4A1		-20...+70	IP65	outdoor	
STE21	PT 100		-20...+70	IP65	outdoor	
STE22	PT 1000		-20...+70	IP65	outdoor	
STE31	NI 1000		-20...+70	IP65	outdoor	
Accessory		DBZ-22 - mounting bracket for air duct sensors STC				

Note: the sensors model STC are supplied with mounting bracket model DBZ-22



TTA

TYPE	RANGE °C	POWER SUPPLY	OUTPUT	ACCURACY	
TTA011	0...+50	24...35 Vcc 24 Vca	0...10 Vdc	± 1 °C	
TTA012	-30...+50	24...35 Vdc 24 Vac	0...10 Vdc	± 1,5 °C	
TTA013	0...+100	24...35 Vdc 24 Vac	0...10 Vdc	± 2 °C	
TTA021	0...+50	11...24 Vdc	4...20 mA	± 1 °C	
TTA022	-30...+50	11...24 Vdc	4...20 mA	± 1,5 °C	
TTA023	0...+100	11...24 Vdc	4...20 mA	± 2 °C	



TTC



TTE



TTI

TYPE	RANGE °C	OUTPUT	ACCURACY (TEMPERATURE) °C	PROTECTION	APPLICATION	
TTC011	0...+50	0...10 Vdc	± 1	IP65	air duct	
TTC012	-30...+50	0...10 Vdc	± 1.5	IP65	air duct	
TTC013	0...+100	0...10 Vdc	± 2	IP65	air duct	
TTC021	0...+50	4...20 mA	± 1	IP65	air duct	
TTC022	-30...+50	4...20 mA	± 1.5	IP65	air duct	
TTC023	0...+100	4...20 mA	± 2	IP65	air duct	
TTE011	0...+50	0...10 Vdc	± 1	IP65	room/outdoor	
TTE012	-30...+50	0...10 Vdc	± 1.5	IP65	room/outdoor	
TTE013	0...+100	0...10 Vdc	± 2	IP65	room/outdoor	
TTE021	0...+50	4...20 mA	± 1	IP65	room/outdoor	
TTE022	-30...+50	4...20 mA	± 1.5	IP65	room/outdoor	
TTE023	0...+100	4...20 mA	± 2	IP65	room/outdoor	
TTI011	0...+50	0...10 Vdc	± 1	IP65	immersion	
TTI012	-30...+50	0...10 Vdc	± 1.5	IP65	immersion	
TTI013	0...+100	0...10 Vdc	± 2	IP65	immersion	
TTI021	0...+50	4...20 mA	± 1	IP65	immersion	
TTI022	-30...+50	4...20 mA	± 1.5	IP65	immersion	
TTI023	0...+100	4...20 mA	± 2	IP65	immersion	

Accessory	DBZ-22 - mounting bracket for air duct transmitters TTC	
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Note: the transmitters model TTC are supplied with mounting bracket model DBZ-22





TYPE	RANGE % r.h.	POWER SUPPLY	OUTPUT	ACCURACY
TUA1	0...100	24...35 Vdc 24 Vac	0...10 Vdc	± 3% r.h. (20 °C)
TUA2	0...100	11...24 Vdc	4...20 mA	± 3% r.h. (20 °C)
TUA3	0...100	24...35 Vdc 24 Vac	0...5 Vdc	± 3% r.h. (20 °C)

TYPE	RANGE % r.h.	OUTPUT	ACCURACY % r.h.	PROTECTION	APPLICATION
TUC1	0...100	0...10 Vdc	± 3	IP65	air duct
TUC2	0...100	4...20 mA	± 3	IP65	air duct
TUC3	0...100	0...5 Vdc	± 3	IP65	air duct
TUE1	0...100	0...10 Vdc	± 3	IP65	room/outdoor
TUE2	0...100	4...20 mA	± 3	IP65	room/outdoor
TUE3	0...100	0...5 Vdc	± 3	IP65	room/outdoor

Accessory	DBZ-22 - mounting bracket for air duct transmitters TUC
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Operating temperature limit -5...+50 °C.

Note: the transmitters model TUC are supplied with mounting bracket model DBZ-22

COMBINED TRANSMITTERS



TYPE	RANGE °C	RANGE % r.h.	POWER SUPPLY	OUTPUT (TEMP)	OUTPUT (HUMIDITY)	PROTECTION
TUTA0111	0...+50	0...100	24...35 Vdc 24 Vac	0...10 Vdc	0...10 Vdc	± 1 °C, ± 3% r.h. (20 °C)
TUTA0212	0...+50	0...100	11...24 Vdc	4...20 mA	4...20 mA	± 1 °C, ± 3% r.h. (20 °C)
TUTA1102	-5...+50	0...100	11...24 Vdc	NTC 10K	4...20 mA	± 0,6 °C, ± 3% r.h. (20 °C)
TUTA1103	-5...+50	0...100	24...35 Vdc 24 Vac	NTC 10K	0...5 Vdc	± 0,6 °C, ± 3% r.h. (20 °C)
TUTA1302	-5...+50	0...100	11...24 Vdc	NTC 1K8	4...20 mA	± 0,6 °C, ± 3% r.h. (20 °C)
TUTA1502	-5...+50	0...100	11...24 Vdc	NTC 10K4A1	4...20 mA	± 0,2 °C, ± 3% r.h. (20 °C)
TUTDA1101*	-5...+50	0...100	24...35 Vdc 24 Vac	NTC 10K	0...10 Vdc	± 0,6 °C, ± 3% r.h. (20 °C)
TUTDA1103*	-5...+50	0...100	24...35 Vdc 24 Vac	NTC 10K	0...5 Vdc	± 0,6 °C, ± 3% r.h. (20 °C)

* model with display

Operating temperature limit -5...+50 °C.



TUTC



TUTE

TYPE	RANGE °C	RAN-GE % r.h.	OUTPUT (TEMP)	OUTPUT (HUMI-DITY)	ACCU-RACY °C	ACCU-RACY % r.h.	APPLICA-TION	
TUTC0111	0...+50	0...100	0...10 Vdc	0...10 Vdc	± 1	± 3	air duct	
TUTC0121	-30...+50	0...100	0...10 Vdc	0...10 Vdc	± 1.5	± 3	air duct	
TUTC0131	0...+100	0...100	0...10 Vdc	0...10 Vdc	± 2	± 3	air duct	
TUTC0212	0...+50	0...100	4...20 mA	4...20 mA	± 1	± 3	air duct	
TUTC0222	-30...+50	0...100	4...20 mA	4...20 mA	± 1.5	± 3	air duct	
TUTC0232	0...+100	0...100	4...20 mA	4...20 mA	± 2	± 3	air duct	
TUTC1101	-5...+50	0...100	NTC 10K	0...10 Vdc	± 0.6	± 3	air duct	
TUTC1102	-5...+50	0...100	NTC 10K	4...20 mA	± 0.6	± 3	air duct	
TUTC1103	-5...+50	0...100	NTC 10K	0...5 Vdc	± 0.6	± 3	air duct	
TUTC1301	-5...+50	0...100	NTC 1K8	0...10 Vdc	± 0.6	± 3	air duct	
TUTC1302	-5...+50	0...100	NTC 1K8	4...20 mA	± 0.6	± 3	air duct	
TUTC1401	-5...+50	0...100	NTC 10K3A1	0...10 Vdc	± 0.2	± 3	air duct	
TUTC1402	-5...+50	0...100	NTC 10K3A1	4...20 mA	± 0.2	± 3	air duct	
TUTC1501	-5...+50	0...100	NTC 10K4A1	0...10 Vdc	± 0.2	± 3	air duct	
TUTC1502	-5...+50	0...100	NTC 10K4A1	4...20 mA	± 0.2	± 3	air duct	
TUTC1601	-5...+50	0...100	NTC 20K	0...10 Vdc	± 0.6	± 3	air duct	
TUTC1602	-5...+50	0...100	NTC 20K	4...20 mA	± 0.6	± 3	air duct	
TUTC1701	-5...+50	0...100	PT1000	0...10 Vdc	± 0.6	± 3	air duct	
TUTC2101	-5...+50	0...100	PT100	0...10 Vdc	± 0.3	± 3	air duct	
TUTC2102	-5...+50	0...100	PT100	4...20 mA	± 0.3	± 3	air duct	
TUTE0111	0...+50	0...100	0...10 Vcc	0...10 Vdc	± 1	± 3	outdoor	
TUTE0121	-30...+50	0...100	0...10 Vcc	0...10 Vdc	± 1.5	± 3	outdoor	
TUTE0131	0...+100	0...100	0...10 Vcc	0...10 Vdc	± 2	± 3	outdoor	
TUTE0212	0...+50	0...100	4...20 mA	4...20 mA	± 1	± 3	outdoor	
TUTE0222	-30...+50	0...100	4...20 mA	4...20 mA	± 1.5	± 3	outdoor	
TUTE0232	0...+100	0...100	4...20 mA	4...20 mA	± 2	± 3	outdoor	
TUTE1101	-5...+50	0...100	NTC 10K	0...10 Vdc	± 0.6	± 3	outdoor	
TUTE1102	-5...+50	0...100	NTC 10K	4...20 mA	± 0.6	± 3	outdoor	
TUTE1103	-5...+50	0...100	NTC 10K	0...5 Vdc	± 0.6	± 3	outdoor	
TUTE1301	-5...+50	0...100	NTC 1K8	0...10 Vdc	± 0.6	± 3	outdoor	
TUTE1302	-5...+50	0...100	NTC 1K8	4...20 mA	± 0.6	± 3	outdoor	
TUTE1401	-5...+50	0...100	NTC 10K3A1	0...10 Vdc	± 0.2	± 3	outdoor	
TUTE1402	-5...+50	0...100	NTC 10K3A1	4...20 mA	± 0.2	± 3	outdoor	
TUTE1501	-5...+50	0...100	NTC 10K4A1	0...10 Vdc	± 0.2	± 3	outdoor	
TUTE1502	-5...+50	0...100	NTC 10K4A1	4...20 mA	± 0.2	± 3	outdoor	
TUTE1601	-5...+50	0...100	NTC 20K	0...10 Vdc	± 0.6	± 3	outdoor	
TUTE1602	-5...+50	0...100	NTC 20K	4...20 mA	± 0.6	± 3	outdoor	
TUTE2101	-5...+50	0...100	PT100	0...10 Vdc	± 0.3	± 3	outdoor	
TUTE2101	-5...+50	0...100	PT100	4...20 mA	± 0.3	± 3	outdoor	
Accessory	DBZ-22 - mounting bracket for air duct transmitters TUTC							

Operating temperature limit -5...+50 °C.
Protection IP65.

Note: the transmitters model TUTC are supplied with mounting bracket model DBZ-22





TCOD



TCOC

TYPE	RANGE °C	RANGE CO ₂	OUTPUT (TEMP.)	OUTPUT (CO ₂)	APPLICATION	
TCOA110101*	-5...+50	0..2000 ppm	NTC 10K	0...10 Vdc	room	
TCODA110101	-5...+50	0..2000 ppm	NTC 10K	0...10 Vdc	room	
TCOA110103*	-5...+50	0..2000 ppm	NTC 10K	0...5 Vdc	room	
TCODA110103	-5...+50	0..2000 ppm	NTC 10K	0...5 Vdc	room	
TCOC1111*	-5...+50	0..2000 ppm	NTC 10K	0...10 Vdc	air duct	
TCOC1121*	-5...+50	0..5000 ppm	NTC 10K	0...10 Vdc	air duct	
TCOC1131*	-5...+50	0..10000 ppm	NTC 10K	0...10 Vdc	air duct	
TCOC1113*	-5...+50	0..2000 ppm	NTC 10K	0...5 Vdc	air duct	
TCOC1123*	-5...+50	0..5000 ppm	NTC 10K	0...5 Vdc	air duct	
TCOC1133*	-5...+50	0..10000 ppm	NTC 10K	0...5 Vdc	air duct	
Accessory	DBZ-22 - mounting bracket for air duct transmitters TCOC					

* models without display

Note: the transmitters model TCOC are supplied with mounting bracket model DBZ-22

ROOM CO₂, HUMIDITY, TEMPERATURE TRANSMITTERS



TYPE	RANGE °C	RANGE % r.h.	RANGE CO ₂	OUTPUT (TEMP.)	OUTPUT (HUMIDITY)	OUTPUT (CO ₂)	
TUCOA111101*	-5...+50	0...100%	0..2000 ppm	NTC 10K	0...10 Vdc	0...10 Vdc	
TUCODA111101	-5...+50	0...100%	0..2000 ppm	NTC 10K	0...10 Vdc	0...10 Vdc	
TUCOA111103*	-5...+50	0...100%	0..2000 ppm	NTC 10K	0...5 Vdc	0...5 Vdc	
TUCODA111103	-5...+50	0...100%	0..2000 ppm	NTC 10K	0...5 Vdc	0...5 Vdc	

* models without display

DUCT AND ROOM AIR QUALITY AND CO₂ TRANSMITTERS



DB-R

DB-K

TYPE	POWER SUPPLY	OUTPUT	APPLICATION	SENSORS	
DB-RLQ	24 Vac/dc	0...10 Vdc, 0...20 mA, 4...20 mA	room	VOC	
DB-RLQ5	24 Vac/dc	0...5 Vdc, 0...20 mA, 4...20 mA	room	VOC	
DB-KLQ	24 Vac/dc	0...10 Vdc, 0...20 mA, 4...20 mA	duct	VOC	
DB-KLQ5	24 Vac/dc	0...5 Vdc, 0...20 mA, 4...20 mA	duct	VOC	
DB-RLQ-CO ₂	24 Vac/dc	0...10 Vcc	room	VOC+CO ₂	
DB-RLQ5-CO ₂	24 Vac/dc	0...5 Vcc	room	VOC+CO ₂	
DB-KLQ-CO ₂	24 Vac/dc	0...10 Vcc	duct	VOC+CO ₂	
DB-KLQ5-CO ₂	24 Vac/dc	0...5 Vcc	duct	VOC+CO ₂	



TYPE	RANGE °C	RANGE % r.h.	RANGE CO ₂	REMOTE SET VARIATION	OUTPUT (TEMP.)	OUTPUT (HUMIDITY)	OUTPUT (CO ₂)
CDPD110011	-5...+50			0...10 Vdc	NTC 10K		
CDPD110111	-5...+50		0...2000 ppm	0...10 Vdc	NTC 10K		0...10 Vdc
CDPD111111	-5...+50	0...100%	0...2000 ppm	0...10 Vdc	NTC 10K	0...10 Vdc	0...10 Vdc
CDPD111011	-5...+50	0...100%		0...10 Vdc	NTC 10K	0...10 Vdc	
CDPD110013	-5...+50			0...5 Vdc	NTC 10K		
CDPD110113	-5...+50		0...2000 ppm	0...5 Vdc	NTC 10K		0...5 Vdc
CDPD111113	-5...+50	0...100%	0...2000 ppm	0...5 Vdc	NTC 10K	0...5 Vdc	0...5 Vdc
CDPD111013	-5...+50	0...100%		0...5 Vdc	NTC 10K	0...5 Vdc	

AIR DIFFERENTIAL PRESSURE TRANSMITTERS 0...2.5 BAR



984M.3

Pressure range (Pa):

Range 1	Range 2	overload max
0...100 Pa (1.0 mbar)	0...250 Pa (2.5 mbar)	20 kPa
0...250 Pa (2.5 mbar)	0...500 Pa (5.0 mbar)	20 kPa
0...500 Pa (5.0 mbar)	0...1.000 Pa (10 mbar)	20 kPa
0...1 kPa (10 mbar)	0...2.5 kPa (25 mbar)	40 kPa
0...5 kPa (50 mbar)	0...10 kPa (100 mbar)	60 kPa
0...25kPa (250 mbar)	0...50 kPa (500 mbar)	300 kPa
0...100 kPa (1000 mbar)	0...250 kPa (2500 mbar)	1.2 MPa
-50 Pa...+50 Pa (-0.5...+0.5 mbar)		

Pressure unit Pascal

Outputs and power supply

0...10 Vdc	24 Vac/dc, with open collector NPN output, 3- wire cable	1
4...20 mA	24 Vdc, without open collector NPN output, 2- wire cable	2
4...20 mA	24 Vac/dc, with open collector NPN output, 3- wire cable	3
0...10 Vdc	24 Vac/dc, without open collector NPN output, 3- wire cable	7
4...20 mA	24 Vac/dc, without open collector NPN output, 3- wire cable	D

Display

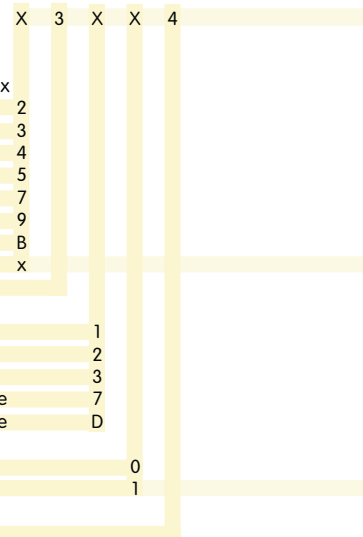
None	0
With LED-display, 3.5 digits (not for output 4...20 mA, 2 wire)	1

Electrical connections

Screw terminal block

Accessories on request

Connection set	DBZ-06
Mounting bracket	DBZ-14A
Mounting bracket	DBZ-14B
Test certificate	104552

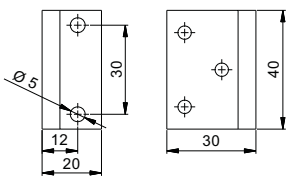




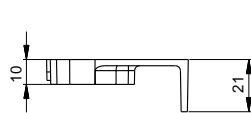
691.	X	X	X	0	X	X	0
Relative pressure range (bar)							
-1...0	0	0					
-1...0,6	0	1					
-1...1	0	2					
-1...1,5	0	3					
-1...3	0	4					
-1...5	0	5					
-1...9	0	6					
0...0,3	2	6					
0...0,6	1	0					
0...1	1	1					
0...1,6	1	2					
0...2,5	1	4					
0...4	1	5					
0...6	1	7					
0...10	3	0					
0...16	3	1					
Sealing material							
FPM (Viton)				0			
EPDM				1			
Calibration							
by factory							
Outputs and power supply							
0...5 Vdc 11...33 Vdc / 24 Vac +15/-10% 3-wire cable						0	
0...10 Vdc 18...33 Vdc / 24 Vac +15/-10% 3-wire cable						1	
4...20 mA 11...33 Vdc 2-wire cable						7	
Electrical connections							
Cable length 1,5 m				(IP65)			0
Connector DIN 43650-A				(IP65)			1
Pressure connections							
Internal thread G 1/4"							
Housing (standard: Inox)							
Accessories							
Mounting bracket	1	0	4	9	5	4	
DIN EN 175301-803-A: female connector and seal (IP65)	1	0	3	5	1	0	
DIN 41524: round plug connector (coupling socket)	1	0	3	5	2	4	
Test certificate	1	0	4	5	5	1	

ACCESSORIES

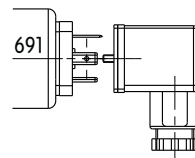
TYPE	DESCRIPTION
103510	DIN EN 175301-803-A: female connector and seal (IP65)
103524	DIN 41524: round plug connector (coupling socket)
104551	test certificate for serie 691
104552	test certificate for serie 984
104954	mounting bracket
DBZ-06	connection set with 2 PVC duct connectors, 2 m flexible PVC pipe and 4 screws for differential pressure switches and transmitters
DBZ-14A	set with mounting bracket and screws
DBZ-14B	set with mounting bracket and screws
DBZ-22	mounting bracket for series STC, TTC, TUC, TUTC and TCO



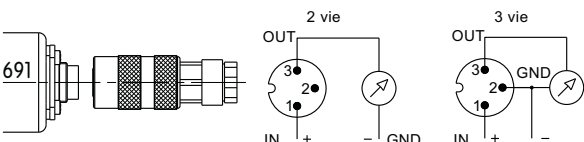
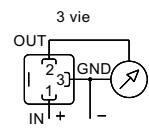
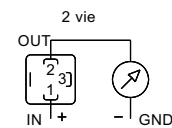
101999



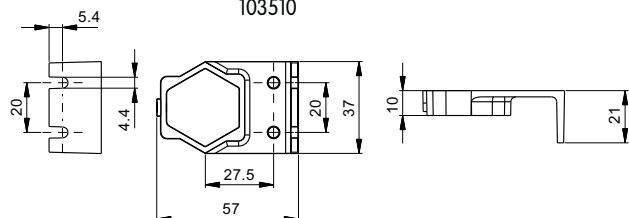
103524



103510



103524



104954



CERTIFICATES

CERTIFICATES

TYPE	DESCRIPTION
103999	test certificate products

Company ISO Certificate 9001:2008



GOST Certificate



GENERAL SALES CONDITIONS

THIS ISSUE SUBSTITUTES AND CANCELS ANY PREVIOUS ONE AND IS SUBJECT TO MODIFICATIONS WITHOUT NOTICE

PRICES

The prices mentioned in our current price list are in Euro (€) do not include VAT and, even if confirmed, can be subject to variations due to increases in raw materials and labour costs. If the price is tied to parity between the Euro and a foreign currency, the rate of exchange value is specified by publication by the Banca d'Italia, as indicated in the „Il Sole 24 Ore“ daily newspaper. If the rate of exchange varies by more than 5%, we reserve the right to modify at any time our prices and the discounts applied to current orders. In such a case the buyer is entitled to withdraw immediately from the order.

The said prices do not include transport and insurance costs, import license expenses, customs charges, etc., and are considered chargeable to the Buyer.

Our quotations are not binding for the order; the Buyer accepts our delivery terms. After issuing our order acknowledgement, the order is confirmed.

Minimum ordering amount: € 200,00 net (under this amount the price in force is not confirmed).

Neutral products are supplied without a surcharge but minimum 50 pieces/part number.

Branding at cost:

- one price only for single colour cliché: € 75,00
- Product branding for min. 100 pieces per order: surcharge of € 1,50 net/piece.

For higher quantities, the surcharge could be discussed.

All products can be supplied with a test certificate (part number 103999) at the net price of **€ 25,00 + VAT** requiring during ordering process.

Certificates of origine issued by Chamber of Commerce € 50,00. Certificates legalized by foreign embassy min. € 250,00.

PACKING

Packing is included in the sale price. Packing different from standard will be invoiced at cost (standard plastic pallets at € 11,00 net each).

DOCUMENTS

We reserve rights on all documents referring to the products and/or made available with quotations, acknowledgements or on delivery. Such documents may neither be copied nor made available to third parties without our written agreement. They must be returned to us on request.

SHIPMENT

Shipment is ex our works in Bressanone, unless otherwise agreed. **As soon as the goods are handed over to the forwarder, all our obligations are considered fulfilled.**

Therefore, all expenses and risks will be the Buyer's responsibility without any exceptions, even if the shipping charges are prepaid by us.

It is the Buyer's responsibility to insure the goods against damage and/or loss. We therefore cannot be held liable for damage and/or loss.

The shipping rates for Italy are at cost price, and we reserve the right to select the most suitable means of transport.

In case of payment by cash on delivery, the fees are always incurred by us and debited to the Buyer.

DELIVERY TERMS

Delivery terms are indicative and are not binding. We cannot be held liable for any production or shipment delay, if such a delay is caused by one of the following reasons: a commercial blockade, difficulties in obtaining raw materials and/or other circumstances beyond our control. In that case we do not accept any penalties and the Buyer renounces any claims for indemnity and/or reimbursement of damages.

We reserve the right to delivery the goods before the agreed date.

CLAIMS

Claims have to be brought to our attention within 8 days after the receipt of the goods, otherwise we will not accept the said claims. Claims do not authorise delays in payment or further price reductions. In case of packing received damaged, the Buyer must inform the forwarder immediately, and send a copy to us for information.

PAYMENT TERMS

Invoices are payable in the currency specified in the invoice.

Payments must be remitted within the agreed expiry data. **We reserve ownership of the goods until the invoice and any accessory expenses have been fully paid.** Failure by the Buyer to pay by the due date automatically gives rise to interest, giving us the right to deem the contract cancelled because of such failure, unless we prefer to ask for settlement of the amount due, by recourse to law if necessary, with bank interest and damages added. If the Buyer stops a payment, the outstanding amount becomes immediately due and we will file a petition for bankruptcy.

Interest on arrears: in the case of delayed payments, interest on arrears will be calculated at the rate of 7 (seven) points above the official rate of discount of the Banca d'Italia in force at the time such interest was applied.

WARRANTY

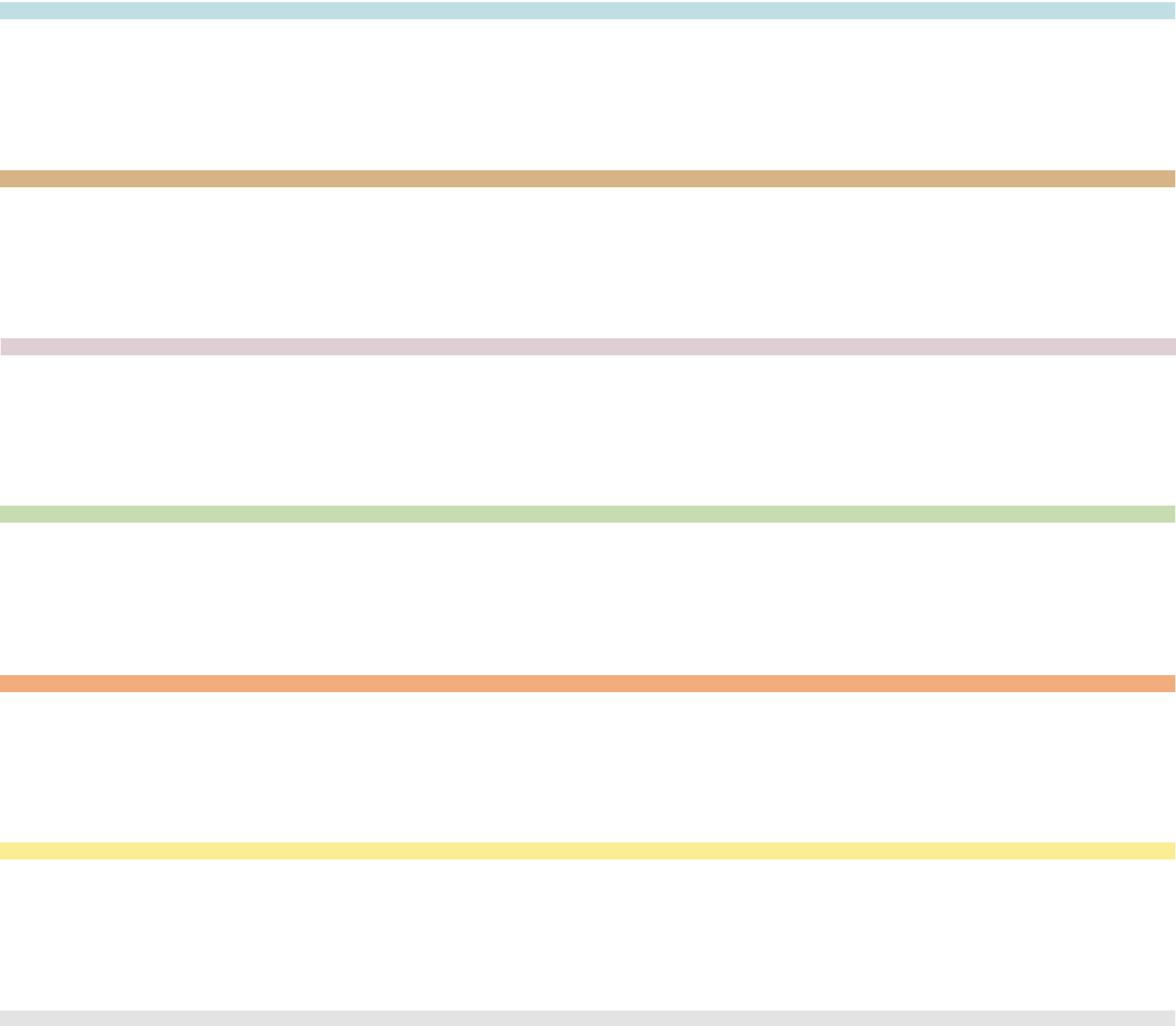
All the products supplied by us are guaranteed against construction faults or defects of material for 24 months from the date of delivery, the term by which we shall repair the faulty parts in order to restore correct operation of the appliances. We do not accept any responsibility for direct or indirect damage caused by the use of the said appliances. Any return of material must be requested from us in writing, must reach us free our works and will be returned ex our works.

The guarantee is restricted exclusively to the repair at our plant, of appliances acknowledged to be defective, whereas all other costs of transport or labour for technical operations on the appliances are charged to the Buyer. The guarantee is voided if the appliances are found to have been tampered with or dismantled.

If interventions on appliances not considered to be under guarantee are requested, we reserve the right to debit the Buyer for management of the return € 40,00 spare parts, manpower etc. not included.

In the event of a dispute, the Buyer accepts that the Bolzano Court of Law is competent and accepts the laws in force in Italy.







IndustrieTechnik

39042 Bressanone (BZ) - Italy

Via Julius Durst, 70

Tel. +39 0472 830626 - Fax +39 0472 831840

info@industrietechnik.it - www.industrietechnik.it