

PRODUCT CATALOGUE

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We are manufacturers of control equipment and measuring instruments for all the variables in the field of thermotechnics for industrial, commercial and residential use since 30 years.

We offer a full and widely diversified range of products for electrical, electronic and electromechanical applications bringing a considerable advantage to the customer, energy saving and personal well-being, allowing you to monitor temperature, pressure, humidity, air quality and flow control.

Our company is TÜV certified according to DIN EN ISO 9001:2008 standard and is focused on quality creating state of the art and providing expert assistance on implementation of solutions for monitoring and supervision.

Our production facility is located in Brixen, South Tyrol. Our products are characterized by the quality "made in Italy" with top performance, and are among the most competitive of the market. Our products are continuously upgrading thanks to ongoing evolution of technologies and production processes with high level know-how.

We are pleased to present the new catalogue in the revised version, designed for easy product search. The new categories reflect the most common customer requirements and are based on both Italian and international markets experience.

We wish you all a year of mutual and fruitful collaboration.

Claudio de Biase
Amministratore Unico

ELECTROMECHANICAL CONTROLS

STRAP-ON THERMOSTATS

AT



TYPE	RANGE °C	DIFFERENTIAL K	MAX. TEMP. SENSIBLE ELEMENT °C	
AT2090	+20...+90	8±3	85	
AT2090U	+20...+90	8±3	85	

U models with knob under cover

STRAP-ON THERMOSTATS

DBAT



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

SINGLE AND TWO STAGE CAPILLARY THERMOSTATS

DBET



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	

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





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-STAGE BOILER THERMOSTATS



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	

U models with knob under the cover



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

U models with knob under the cover
 ST manual maximum reset



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



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



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



TYPE	RANGE °C	HYSTERESIS IN THE STAGE K	RESET	PROTECTION	CAPILLARY LENGTH 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-05 - Set of 6 mounting brackets for capillary of frost protection thermostats				

FT minimal manual reset

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

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

SINGLE AND TWO STAGE AIR DUCT THERMOSTATS



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

U models with knob under the cover
 TW with knob under the cover, SPDT contact
 STB with manual security reset, SPDT contact

PRESSION, HUMIDITY, LEVEL, FLOW SWITCHES

LIQUID FLOW SWITCHES

DB..MI



TYPE	FITTING G	SETTING RANGE (*) l/min H ₂ O	MAX RECOMMEN- DED 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 for horizontal decreasing flow.
** end of scale

DUCT AND ROOM HYGROSTATS

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

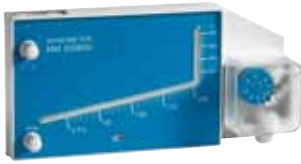
AIR DIFFERENTIAL PRESSURE SWITCHES

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 5x8 horse 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		





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	

LIQUID FLOW SWITCHES

SF



TYPE	PIPE Ø	MAX. PRESSURE bar	NORMAL MEDIA (body in brass)	AGGRESSIVE MEDIA (body in stainless steel AISI 316L)	BODY WITH PIPE FITTING	PROTECTION		
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							

NPT 1" NPT connector
 * models with TÜV approval

AIR FLOW SWITCHES

SL



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	PROTECTION		
SL1E	1.0	2.5	8.0	9.2	85	IP65		
Accessory	DBZ-08 - Stainless steel Aisi 301 vane for air flow switch							

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	

MOTORIZED VALVES

ELECTROTHERMAL ACTUATORS FOR MANIFOLDS

SEIC



TYPE	FORCE N	POWER SUPPLY Vac 50/60 Hz	ACTION	POWER CONSUMPTION VA	CHARACTERISTICS
SEIC24	90	24	On-Off	3.0	running time 210 sec., stroke 3.5 mm, wax sensible element, M30 connector, 1 m cable, IP44
SEIC230	90	230	On-Off	3.0	
SEIC24S	90	24	On-Off	3.0	
SEIC230S	90	230	On-Off	3.0	
Accessory	ADVFX adapter for SEIC/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

ZONE VALVES FOR ELECTRIC ACTUATORS SM SERIES

DB-VZ



TYPE	CONNECTION	KVS m³/h	MAX. DIFF. PRESS. bar	CHARACTERISTICS
2 WAYS				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 WAYS				
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	

ELECTRIC ACTUATORS FOR DB-VZ VALVES SERIES

SM



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



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 attacchi)	G 1/2	0.25	0.25	2.5		
VFX411	3 (4 attacchi)	G 1/2	0.4	0.4	2.5		
VFX412	3 (4 attacchi)	G 1/2	0.6	0.6	2.5		
VFX413	3 (4 attacchi)	G 1/2	1.0	0.8	2.5		
VFX414	3 (4 attacchi)	G 1/2	1.6	1.0	2.5		
VFX435	3 (4 attacchi)	G 3/4	2.5	1.6	2.5		
VFX437*	3 (4 attacchi)	G 3/4	4.0	2.5	1.5		
VFX439*	3 (4 attacchi)	G 3/4	6.0	4.0	1.5		
Accessory	VTP manual control						
	ADVFX adapter for SEIC/VFX coupling up to KVS 2,5 to allow the valve to be normally open on direct way						

* 140 N actuator needed for "SEITP..."



TYPE	FORCE N	POWER SUPPLY Vac 50/60 Hz	ACTION	POWER CON- SUMP. VA	CHARACTERISTICS
SEIT24	100	24	On-Off	3.0	running time 210 sec, stroke 2.5 mm,
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	



TYPE	FORCE	POWER SUPPLY Vac 50/60 Hz	ACTION	POWER CON-SUMP.	CHARACTERISTICS
	N			VA	
SEITP24S	140	24	On-Off	3.0	wax sensible element, M30 connector, 2 m cable, IP44
SEITP230S	140	230	On-Off	3.0	
SEIM24	100	24	proportional 0...10 Vdc	3.5	
SEIMP24	140	24	proportional 0...10 Vdc	3.5	

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

THREADED FAN COIL VALVES FOR ELECTRIC ACTUATORS SE2 SERIES

VFT



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 attacchi)	G 1/2	0.25	0.25	2.5	
VFT411	3 (4 attacchi)	G 1/2	0.4	0.4	2.5	
VFT412	3 (4 attacchi)	G 1/2	0.6	0.6	2.5	
VFT413	3 (4 attacchi)	G 1/2	1.0	0.8	2.5	
VFT414	3 (4 attacchi)	G 1/2	1.6	1.0	2.5	
VFT415	3 (4 attacchi)	G 1/2	2.5	1.6	2.5	
VFT435	3 (4 attacchi)	G 3/4	2.5	1.6	2.5	
VFT437	3 (4 attacchi)	G 3/4	4.0	2.5	1.5	
VFT439	3 (4 attacchi)	G 3/4	6.0	4.0	1.5	
Accessory	VTP manual control					



TYPE	FORCE N	POWER SUPPLY Vac 50/60 Hz	ACTION	POWER CONSUMP. 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	

THREADED GLOBE VALVES, STROKE 5,5 MM FOR ELECTRIC ACTUATORS SE4 SERIES



TYPE		CON- NECTION	KVS m³/h	MAX. DIFF. PRESS. bar *	CHARACTERISTICS
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 charact. 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 N	POWER SUPPLY Vac 50/60 Hz	ACTION	POWER CON- SUMP. VA	CHARACTERISTICS
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	

M30 model with M30x1.5 ring connection instead of 3/4"



TYPE		CON- NEC- TION	KVS m³/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 charact. 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)			



TYPE		DN mm	KVS m³/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 charact. 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 mm	KVS m³/h	MAX. DIFF. PRESS. bar *	CHARACTERISTICS		
2 WAYS	3 WAYS						
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 70 sec., stroke 16,5 mm, manual override, self-adjusting, 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 valves Industrietechnik series 2S e 3S ADV2 - adapter for valves Industrietechnik series 2S- e 3S ADV3 - adapter for valves Controlli series VMB/VSB					

S 2 microinterruttori 230 Vac 3A (escluso il modello SE6M24)

FLANGED GLOBE VALVES FOR ELECTRIC ACTUATORS DB-DA7x

VFF/2F/3F



TYPE		DN mm	KVS m³/h	STROKE mm	MAX. DIFF. PRESS. bar *		CHARACTERISTICS		
2 WAYS	3 WAYS				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 on valve, angle way 0...1% on KVs on valve, 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)



TYPE	FORCE N	POWER SUPPLY Vac	ACTION	POWER CON- SUMP. VA	CHARACTERISTICS
DB-DA71F-S2*	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	Coupling valve actuator				

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

BUTTERFLY VALVES FOR ELECTRIC ACTUATORS DA/DM SERIES

VF



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..	

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 switches adjusta- ble, direction of rotation selectable, IP55
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	

DAMPER ACTUATORS

DAMPER ACTUATORS

TYPE	TORQUE Nm	DAMPER AREA mq	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.		
DAS24F	8	1.5	70	24 Vac/dc		2 p.		
DAS24FS	8	1.5	70	24 Vac/dc	•	2 p.		
DAS230F	8	1.5	70	230 Vac		2 p.		
DAS230FS	8	1.5	70	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.		

ELECTRONIC INDUSTRIAL CONTROLLERS

ELECTRONIC INDUSTRIAL 1- AND 2- STAGE THERMOSTATS

DB-IxD



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	

ELECTRONIC INDUSTRIAL DIFFERENTIAL THERMOSTATS

DB-IDD



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

Supplied with 2 cable sensors (length 2m)

DIGITAL THERMOREGULATORS

DTR



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



	INPUT 1			INPUT 2				
	X	X	XX	X	X	XX	X	1
DB-R								
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				
	X	X	XX	X	X	XX	X	3
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 *		
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

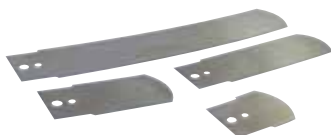


ACCESSORIES

ACCESSORIES



ADVI



DBZ-09



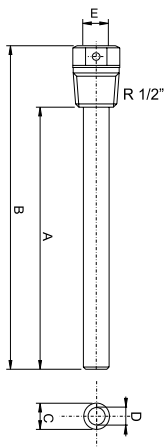
HEATER1



VTP

TYPE	DESCRIPTION
101999	mounting bracket with M4 screws
103510	DIN EN 175301-803-A: female connector and seal (IP65)
103524	DIN 41524: round plug connector (coupling socket)
103999	test certificate products
104551	test certificate for serie 691
104552	test certificate for serie 984
104954	mounting bracket
ADV1	adapter for SE6 with valves Industrietechnik series 2S e 3S
ADV2	adapter for SE6 with valves Industrietechnik series 2S- e 3S
ADV3	adapter for SE6 with valves Controlli series VMB/VSB
ADVFX	adapter for SEIC, VFX coupling up to KVS 2,5 to allow the valve to be normally open on direct way
AMV5	coupling valve actuator
ATEX	ATEX certificate
DBZ-05	set of 6 mounting brackets for capillary of frost protection thermostats
DBZ-06	connection set with 2 PVC (5x8) 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
EXL-IRU-1	remote converter signal accessory
HEATER1	heater for stem valves series VFS and VFFS
RIC-MXPX	liquid charger for DB-M...P...
VTP	manual control for valves VFX-VFT

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



ELECTRONIC ROOM CONTROLLERS

ELECTRONIC ROOM THERMOSTATS

DB-TA-3



DBTA-343-199



DBTA-363-436

RANGE +5...+30°C DB-TA-		Pipes	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 ctrl	▲	•	zn	A	24 Vac	
363-	436	2	•		▲	•	auto	A	230 Vac	
367-	439	2		3 point ctrl	▲	•	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	A	sensor NTA010-623 (NTC 10K)
▲	continuous fan/thermostatic fan/off switch	B	sensor NTB010-623 (NTC 100K)
auto	s/w change over with water sensor		
~	on/off/electric heater switch		
m/a	min speed/automatic speed switch		



ELECTRONIC ROOM CONTROLLERS WITH DISPLAY

ELECTRONIC ROOM CONTROLLERS WITH DISPLAY

DB-TA-3



DBTA-33A-13A



DBTA-393-433



DBTA-3A3-700



DBTA-3C3-199

INDEX FOR MODELS DBTA-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 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-		Pipes	OUTPUTS		SWITCHES			Remote S/W	Economy	Remote sensor	Power supply	
			Relay	0...10 Vdc	On/Off	3 speed	S/W					
31A-	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	• heat	••			zn		❖	-	24 Vac	
	100	4	• heat	••	•		zn		❖			
	130	4	• heat	••	•	•	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/cont1/cont2/ cont3 (par)	par	par		A	230 Vac	
		4	••••			auto			❖			
3E3-	139	2	• (cool)		•	•			❖	A	230 Vac	
	199	2	• (cool)		•				❖			
3F3-	139	2	• (cool)		•	•			❖	A	230 Vac	
	199	2	• (cool)		•				❖			
	939	2	• (cool)			•			❖			
	999	2	• (cool)						❖			
3G3-	700	2/4	3 point ctrl			•Vct	par			A	230 Vac	



MULTIFUNCTION UNIVERSAL* DDC CONTROLLER



EASY/1



EASY/2

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.

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

* Controller can be configured by touch buttons on display or by EASYKIT tool

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

POWER CONTROLLERS



PWN



PWM



PWK



PWQ



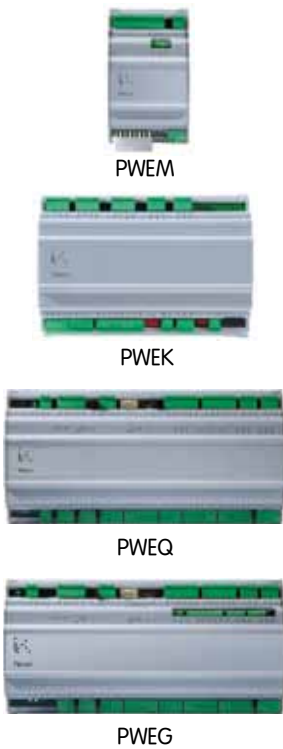
PWG

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, 4x20, 10 DIN modules, version INTRABUS
PWK4XXV	24 Vac/dc LCD, 4x20, 10 DIN modules, version CANBUS
PWK6XXV	24 Vac/dc without display, 4x20, 10 DIN modules, version CANBUS
CONTROLLER PWQ	
PWQ4XXV	24 Vac/dc LCD, 4x20, 14 DIN modules, version CANBUS
PWQ6XXV	24 Vac/dc without display, 4x20, 14 DIN modules, version CANBUS
CONTROLLER PWG	
PWG4XXV	24 Vac/dc LCD, 4x20, 14 DIN modules, version CANBUS
PWG6XXV	24 Vac/dc without display, 4x20, 14 DIN modules, version CANBUS

POWER EXPANSIONS MODULES

EXPANSIONS POWER

PWE...



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 PWE6		
PWE66	24 Vac/dc without display, 14 DIN modules, version CANBUS	

POWER ACCESSORIES

REMOTE SETPOINT CONTROLLER

CDP



TYPE	ON/OFF	3 SPEEDS	DISPLAY	SENSOR	
DB-CDP/N1				NTC	
DB-CDP/D2	•	•	•	NTC	
CDP-TU1103	•			NTC %RH (0...5V)	
PWCDP/N2	•	•		NTC	

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		





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	

ACCESSORY POWER



EASYKIT



PWGRAPH

PWT TOUCH



PWWALL



PWSER



PWI485

PW5485



PWMTR



ITPVC

TYPE	DESCRIPTION	NOTE	
EASYKIT	USB/Serial converter		
	PWSER - Communication module RS485		
	PWI485 - Interface for RS485 communication, one output		
	Configuration software CD		
PWCONF	Factory calibration for EASY controller		
PWGRAPH	Graphic display W/B lcd, visible area 57x30 mm, res. 128x64, 6 push-buttons, CANBUS	For wall/panel mounting (Bt506) 130x115 mm	
PWT TOUCH	Graphic display W/B lcd touch screen, visible area 81x48 mm, res. 240x140, 6 push-buttons, CANBUS	For wall/panel mounting (Bt506) 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	
PWI485	Interface for RS485 communication, one output	4 DIN modules	
PW5485	Interface for RS485 communication, five outputs	8 DIN modules	
PWMTR	Transformer 230/12 Vac 5,6 VA	For PWN - PWM	
ITPVC	Prime Virtual Control PC for supervisor system - 1,8 Ghz Atom Quad CORE processor - 2 GB Ram - 160 GB hard disk - 2 serial ports RS 485 - 1 serial port RS 232 - 1 port Ethernet 10/100/1000 - 4 ports USB - very compact dimensions H 264 x L 112 x P 230	With licensed Windows and Supervisor System already installed.	
	Accessories on request to pay: monitor, mouse and keyboard		



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% cavo a 3 poli						0	
0...10 Vdc 18...33 Vdc / 24 Vac +15/-10% cavo a 3 poli						1	
4...20 mA 11...33 Vdc cavo a 2 poli						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



984M.3

					X	3	X	X	4
Pressure range (Pa):									
Range 1		Range 2		overload max					
0...100 Pa (1.0 mbar)		0...250 Pa (2.5 mbar)		20 kPa					2
0...250 Pa (2.5 mbar)		0...500 Pa (5.0 mbar)		20 kPa					3
0...500 Pa (5.0 mbar)		0...1.000 Pa (10 mbar)		20 kPa					4
0...1 kPa (10 mbar)		0...2.5 kPa (25 mbar)		40 kPa					5
0...5 kPa (50 mbar)		0...10 kPa (100 mbar)		60 kPa					7
0...25kPa (250 mbar)		0...50 kPa (500 mbar)		300 kPa					9
0...100 kPa (1000 mbar)		0...250 kPa (2500 mbar)		1.2 MPa					B
-50 Pa...+50 Pa (-0.5...+0.5 mbar)									x
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									104551



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-CO2	24 Vac/dc	0...10 Vdc	room	VOC+CO ₂
DB-RLQ5-CO2	24 Vac/dc	0...5 Vdc	room	VOC+CO ₂
DB-KLQ-CO2	24 Vac/dc	0...10 Vdc	duct	VOC+CO ₂
DB-KLQ5-CO2	24 Vac/dc	0...5 Vdc	duct	VOC+CO ₂

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/PT1	PT 1000	-20...+60	IP30
DTB/NI	Ni 1000	-20...+60	IP30

SENSORS

NI, NT, PT



TYPE	SENSORS	SIZES	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

TYPE	SEN-SORS	SIZES	MEASURING RANGE °C	PROTEC-TION	
 NTB010-623	NTC 100K	ø 6 x 23 mm x 1.00 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 pipe temperature -50...+600 °C
max cable temperature in glass fibre -50...+350 °C

INDUSTRIAL TEMPERATURE SENSORS

ST



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	





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

* models without display

TEMPERATURE / HUMIDITY / COMBINED TRANSMITTERS

TEMPERATURE TRANSMITTERS



TTA



TTC



TTE



TTI

TYPE	RANGE °C	POWER SUPPLY	OUTPUT	ACCURACY
TTA011	0...+50	24...35 Vdc 24 Vac	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

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





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 % u.r.	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	

Use temperature limit -5...+50 °C.

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)	

Use temperature limit -5...+50 °C.

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





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 Vdc	0...10 Vdc	± 1	± 3	outdoor
TUTE0121	-30...+50	0...100	0...10 Vdc	0...10 Vdc	± 1.5	± 3	outdoor
TUTE0131	0...+100	0...100	0...10 Vdc	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
TUTE2102	-5...+50	0...100	PT100	4...20 mA	± 0.3	± 3	outdoor

Use temperature limit -5...+50 °C.

Protection IP65.





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 invoicing 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.



References



AUCHAN
Moscow - Russia

UMM AL QURA UNIVERSITY
Riyadh - Saudi Arabia

KEMPINSKI BARBAROS
BAY HOTEL
Bodrum - Turkey

THE MARMARA HOTEL
Istanbul - Turkey

DISNEYLAND
Ashgabat - Turkmenistan

MATERNITY HOSPITAL
Ashgabat - Turkmenistan

MINISTRY OF HEALTH
Ashgabat - Turkmenistan

ATIRUS Shopping Mall
Istanbul - Turkey

KTU ROOT CELL LABORATORY
Trabzon - Turkey

HOME FOR ELDERLY PEOPLE
Astana - Kazakhstan

DARUSSAFKA BANK
Izmir - Turkey

AVRORA BUSINESS PARK
Moscow - Russia

TORRE AGBAR
Barcelona - Spain

PRINCE FAHD
BIN SULTAN PALACE
Riyadh - Saudi Arabia

PINE CLIFF HOTEL
Faro-Algarve - Portugal

PREMIER HOSPITAL
Istanbul - Turkey

CAIRO AIRPORT
Egypt

INT. BUSINESS CENTRE
Memphis - USA

AGT-AHGABAT THEATER
Istanbul - Turkey

GENERAL HOSPITAL
"AGII ANARGYRI"
Athens - Greece

CAPRICORN BUSINESS
CENTRE
Hamburg - Germany

IZMIR AIRPORT
Turkey

ISTANBUL AIRPORT
Turkey

NATIONAL LIBRARY
OF TURKMENISTAN
Turkmenistan

ANKARA AIRPORT
Turkey

INTERNATIONAL AIRPORT
Tbilisi - Georgia

AL JAZEERA HOSPITAL
Abu Dhabi - UAE

WALT DISNEY CRUISE
Florida - USA

McLAREN F 1
Silverstone - England

ROCKWELL
Manila - Philippines

HOTEL CHAIN
5 stars: Hyatt Regency,
Sheraton, Hilton, Ritz.

RAI 1
Milano - Italy

HARRODS
London - England

BASE NATO
Isola delle Femmine - Italy

HISAR HOSPITAL
Istanbul - Turkey

TWIN TOWERS
Kuala Lumpur - Malaysia

FINCANTIERI
Trieste - Italy

TGV (High Speed Trains)
France

FIAT
Torino - Italy

OLYMPIC VILLAGE
Sydney 2000 - Australia

GOVERNMENT PALACES
HOSPITALS - UNIVERSITIES
Argentina, Kuwait, Saudi
Arabia, Bahrain, Lebanon,

SULTANS PALACE
Brunei

RIDGES HOTEL
Dubai - UAE

INSTALLATION
MOBILE PHONES:
Tim, Vodafone, Wind

BARILLA
Parma - Italy

FERRERO
Asti - Italy

LOACKER
Bolzano - Italy

MILANELLO
Milano - Italy

SAN BENEDETTO
Venezia - Italy

AIRPORTS
Milano, Bologna, Frankfurt,
Beijing

AUTODROMO FORMULA 1
Istanbul - Turkey

PRINCESS "Love Boat"
Fincantieri - Trieste - Italy

RIDGES HOTEL
Dubai - UAE

COSTA CROCIERE
Fincantieri - Trieste - Italy

QATAR UNIVERSITY
Doha - Qatar

SKY TOWER-Shk Zayed Road
Dubai - UAE

KHORPHAKHAN HOSPITAL
Abu Dhabi - UAE

DUCAB FACTORY
Abu Dhabi - UAE

CONFERENCE PALACE HOTEL
Abu Dhabi - UAE

MAZAYA SHOPPING
Sharjah - UAE

ROTANA VILLA HOTEL
Abu Dhabi - UAE

EMPOWER (district cooling
company)
Dubai - UAE

KYP SWIMMING POOL
Ashgabat - Turkmenistan

RAMADA HOTEL
Istanbul - Turkey

MINISTRY OF HEALTH
Dibba - UAE

DIBBA HOSPITAL
Dibba - UAE

PALLADIUM SHOPPING
MALL AND RESIDENCE
Istanbul - Turkey

ERBIL AIRPORT
North Iraq

SABIHA GOKCEN AIRPORT
Istanbul - Turkey

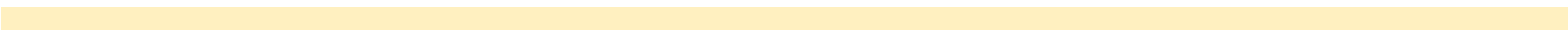
KAF HOSPITAL
Ashgabat - Turkmenistan

ENFIDHA AIRPORT
Tunis - Tunisia

HOSPITAL CASCAIS
Portugal

SHANGRI-LA'S RESORT & SPA
Cebu - Philippines





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