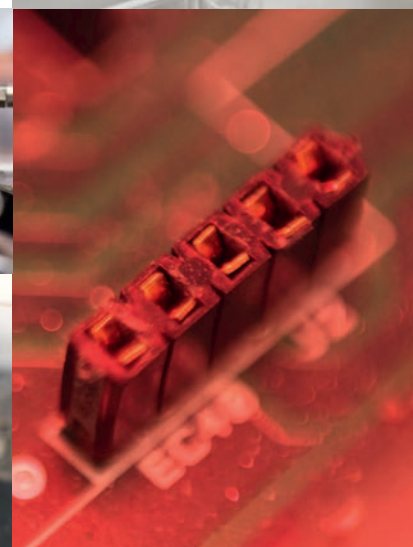


3 Electromechanical thermostats



ROOM THERMOSTAT

1-stage room thermostat. Models with on/off switch or summer/winter switch.



TA33/I

Technical data	
Sensor element	Gas-filled bellows with membrane
Hysteresis	1 K
Contact	NO/NC 250 V AC 16 (2,5) A
Temperature range	5...30 °C
Ambient temperature	Max. 50 °C
Ambient humidity	10...90 % RH (non-condensing)
Storage temperature	0...50 °C
Storage humidity	< 95 % RH
Mounting	Room
Casing	ABS, fireproof according UL94 V-0 color (Euro White)
Dimensions	80 x 80 x 44 mm
Weight	128 g
Protection class	IP20
Isolation class	I

Article	On/off button	Summer/winter switch	Hysteresis
TA31/I	-	-	1K
TA33/I	X	-	1K
TA34/I	-	X	1K

ACCESSORIES

Article	Description
000071	Pin for knob lock - 2 pcs. per device

ROOM THERMOSTATS WITH FIXED HYSTERESIS, IP 54

A wide range of low cost room thermostats for wall mounting.



ET060U



ET06060U

Technical data	
Sensor element	Liquid-filled coiled copper nickel bulb
Contacts	Microswitches with switching SPDT contacts (heat/cool)
Switch capacity	NC 16 (6) A, 250 V AC / NO 6 (4) A, 250 V AC
Temperature range	°C
Ambient temperature	-10...+65 °C
Ambient humidity	10...90% RH (without condensing)
Storage temperature	-20...+65 °C
Storage humidity	< 95 % RH
Max. bulb temperature	65 °C
Casing	Bayblend® base, ABS cover
Weight	1 stage: 1340 g 2 stage: 2520 g
Protection class	IP54
Isolation class	I
Dimensions	108 x 70 x 72 mm (132 x 88 x 70 mm for 2 stage models)

Article	Temperature range 1	Temperature range 2	Hysteresis range 1	Hysteresis range 2	Hidden setpoint
ET060	0...+60 °C		1.5±1 K		-
ET060U	0...+60 °C		1.5±1 K		X
ET06060	0...+60 °C	0...+60 °C	1.5±1 K	1.5±1 K	-
ET06060U	0...+60 °C	0...+60 °C	1.5±1 K	1.5±1 K	X



Note: range 2 always under the cover, range 1 under the cover

WALL THERMOSTAT, IP65

High quality thermostats for use in cooling, heating and ventilation systems.

Technical data	
Sensor element	Liquid-filled coiled copper bulb
Contacts	Microswitches with SPDT contacts (heat/cool)
Switch capacity	15 (8) A, 24...250 V AC
Ambient temperature	-35...+60 °C °C
Ambient humidity	10...90 % RH (non-condensing)
Storage temperature	-40...+65 °C
Storage humidity	< 95 % RH
Max. bulb temperature	65 °C
Casing	Bayblend® base, ABS cover
Dimensions	108 x 70 x 72 mm
Weight	450 g
Protection class	IP65
Isolation class	I



DBET-26



DBET-26U

Article	Temperature range	Steps	Hysteresis	Step diff.	Hidden setpoint
DBET-22	-30...+30 °C	1	2...15 K	-	-
DBET-22U	-30...+30 °C	1	2...15 K	-	X
DBET-23	-30...+30 °C	1	1 K	-	-
DBET-22/2	-30...+30 °C	2	1 K	2...5 K	-
DBET-26	0...60 °C	1	2...15 K	-	-
DBET-27	0...60 °C	1	1 K	-	-
DBET-26U	0...60 °C	1	2...15 K	-	X
DBET-26/2	0...60 °C	2	1 K	2...5 K	-
DBET-22/2U	-30...+30 °C	2	1 K	2...5 K	X
DBET-23U	-30...+30 °C	1	1 K	-	X
DBET-26/2U	0...60 °C	2	1 K	2...5 K	X
DBET-27U	0...60 °C	1	1 K	-	X

CAPILLARY THERMOSTATS, IP54

A wide range of low cost thermostats.



TC090

Technical data	
Sensor element	Liquid-filled coiled copper bulb with capillary PVC protected
Bulb	Ø 6.8 mm
Length, capillary tube	1.5 m
Contacts	Microswitches with SPDT contacts (heat/cool)
Switch capacity	NC 16 (4) A 250 V AC / NO 10 (6) A 250 V AC
Ambient temperature	-10...+65 °C
Ambient humidity	10...90% RH (non-condensing)
Storage temperature	-40...+70 °C
Storage humidity	< 95 % RH
Max. bulb temperature	130 °C
Casing	Bayblend® base, ABS cover
Weight	360 g
Protection class	IP54
Isolation class	I
Dimensions	108 x 70 x 72 mm

Article	Temperature range	Hysteresis
TC060	0...60 °C	4±1 K
TC090	0...90 °C	4±1 K

ACCESSORIES

Article	Description
DBZ-30/14	Brass pocket 120 mm, ø external 8 mm, ø internal 7 mm, connection R 1/2"
DBZ-31/14	Stainless steel pocket AISI 304, 120 mm, ø external 9 mm, ø internal 7 mm, connection R 1/2"

CAPILLARY THERMOSTAT, IP65

High quality thermostats for use in cooling, heating and ventilation systems.

Technical data	
Sensor element	Liquid-filled coiled copper bulb
Bulb	Ø 9.5 (Ø 8 for range 50...120°C)
Length, capillary tube	1.5 m
Contacts	Microswitches with SPDT contacts (heat/cool)
Switch capacity	15 (8) A, 24...250 V AC
Ambient temperature	-35...+65 °C
Ambient humidity	10...90 % RH (non-condensing)
Storage temperature	-40...+70 °C
Storage humidity	< 95 % RH
Casing	Bayblend® base, ABS cover
Dimensions	108 x 70 x 72 mm
Weight	400 g
Protection class	IP65
Isolation class	I



DBET-6



DBET-16U

Article	Temperature range	Steps	Hysteresis	Step diff.	Max. bulb temperature	Hidden setpoint	Immersion well to use
DBET-4	-30...+30 °C	1	2...20 K	-	60 °C	-	DBZ-01, DBZ-02
DBET-4U	-30...+30 °C	1	2...20 K	-	60 °C	X	DBZ-01, DBZ-02
DBET-4/2	-30...+30 °C	2	1 K	2...5 K	60 °C	-	DBZ-01, DBZ-02
DBET-5	-30...+30 °C	1	1 K	-	60 °C	-	DBZ-01, DBZ-02
DBET-6	-30...+30 °C	1	Minimum manual reset	-	60 °C	-	DBZ-01, DBZ-02
DBET-16	20...90 °C	1	2...20 K	-	100 °C	-	DBZ-01, DBZ-02
DBET-16U	20...90 °C	1	2...20 K	-	100 °C	X	DBZ-01, DBZ-02
DBET-17	20...90 °C	1	1 K	-	100 °C	-	DBZ-01, DBZ-02
DBET-18	20...90 °C	1	Maximum manual reset	-	100 °C	-	DBZ-01, DBZ-02
DBET-10	50...120 °C	1	2...20 K	-	150 °C	-	DBZ-17
DBET-5U	-30...+30 °C	1	1 K	-	60 °C	X	DBZ-01, DBZ-02
DBET-7	0...60 °C	1	2...20 K	-	75 °C	-	DBZ-01, DBZ-02
DBET-7/2	0...60 °C	2	1 K	2...5 K	75 °C	-	DBZ-01, DBZ-02
DBET-8	0...60 °C	1	1 K	-	75 °C	-	DBZ-01, DBZ-02
DBET-11	50...120 °C	1	1 K	-	150 °C	-	DBZ-17

ACCESSORIES

Article	Description
DBZ-01	Brass pocket 120mm, Ø external 11 mm, Ø internal 10 mm, connection R 1/2"
DBZ-02	Stainless steel pocket AISI 304, 120 mm, Ø external 12 mm, Ø internal 10 mm, connection R 1/2"
DBZ-16	Brass pocket 120mm, Ø external 10 mm, Ø internal 8,5 mm, connection R 1/2"
DBZ-17	Stainless steel pocket AISI 304, 120 mm, Ø external 10mm, Ø internal 8,5 mm, connection R 1/2"

DUCT THERMOSTAT, IP54

A range of high quality duct thermostats.



TZR6585

Technical data	
Sensor element	Liquid-filled coiled copper bulb with 200 mm protection spring and mounting bracket
Contacts	Microswitches with SPDT contacts (heat/cool)
Switch capacity	TZ090U: NC 16 (6) A, 250 V AC, NO 6 (4) A, 250 V AC / TZR6585: NC 16 (2,5) A, 250 V AC, NO 0,5 A, 250 V AC
Ambient temperature	-35...+65 °C
Ambient humidity	10...90% RH (non-condensing)
Insertion length	185 / Ø 21 mm
Storage temperature	-20...+70 °C
Storage humidity	< 95 % RH
Casing	Bayblend® base, ABS cover
Weight	590 g
Dimensions	108 x 70 x 72 mm
Protection class	IP54
Isolation class	I

Article	Temperature range	Hysteresis	Max. bulb temperature	Function	Hidden setpoint	Switch capacity
TZ090U	0...90 °C	4±1 K	120 °C	With SPDT contact	X	NC 16 (6) A, 250 V AC / NO 6 (4) A, 250 V AC
TZR6585	65...85 °C	20±5 K	125 °C	Manual maximum reset (unit can be reset only if temperature drops below the setpoint minus the hysteresis.)	-	NC 16 (2,5) A, 250 V AC / NO 0,5 A, 250 V AC

ACCESSORIES

Article	Description
DBZ-25	Spiral protection bracket for capillary



Note: the thermostats are supplied with spiral protection bracket model DBZ-25.

The device can only be rearmed if the temperature falls below the setpoint minus the hysteresis value.

DUCT THERMOSTAT, IP65

High quality thermostats for use in cooling, heating and ventilation systems.

Technical data	
Sensor element	Liquid-filled coiled copper bulb with 200 mm protection spring and mounting bracket
Contacts	Microswitches with SPDT contacts (heat/cool)
Switch capacity	15 (8) A, 24...250 V AC
Ambient temperature	-35...+65 °C
Ambient humidity	10...90 % RH (non-condensing)
Insertion length	200 / Ø 21 mm
Storage temperature	-40...+70 °C
Storage humidity	< 95 % RH
Casing	Bayblend® base, ABS cover
Weight	690
Dimensions	108 x 70 x 72 mm
Protection class	IP65
Isolation class	I



DBTZ-7



DBTZ-12U

Article	Temperature range	Steps	Hysteresis	Step diff.	Max. bulb temperature	Hidden setpoint
DBTZ-2U	-30...+30 °C	1	1 K	-	60 °C	X
DBTZ-7	0...60 °C	1	2...20 K	-	75 °C	-
DBTZ-7/2	0...60 °C	2	1 K	2...5 K	75 °C	-
DBTZ-8	0...60 °C	1	1 K	-	75 °C	-
DBTZ-12U	50...120 °C	1	Manual maximum reset	-	140 °C	X

ACCESSORIES

Article	Description
DBZ-25	Spiral protection bracket for capillary



Note: the thermostats are supplied with spiral protection bracket model DBZ-25.

ELECTROMECHANICAL CLAMP-ON THERMOSTAT, IP20

High quality thermostats for use in cooling, heating and ventilation systems.



Technical data	
Sensor element	Bimetal
Contacts	SPDT contacts
Switch capacity	NC 16 (2,5) A, 250 V AC / NO 2,5 A, 250 V AC
Ambient temperature	max 85 °C
Ambient humidity	10...90 % RH (non-condensing)
Storage temperature	-20...+60 °C
Storage humidity	< 95 % RH
Max. bulb temperature	90 °C
Casing	Zinc plated steel plate, not sealed ABS cover
Weight	150 g
Protection class	IP20
Dimensions	39 x 55 x 112 mm
Isolation class	I

Article	Temperature range	Hysteresis	Hidden setpoint
AT2090	+20...+90 °C	8±3 K	-
AT2090U	+20...+90 °C	8±3 K	X

CLAMP-ON THERMOSTAT, IP65

Thermostats for use in cooling, heating and ventilation systems.



DBAT-5

Technical data	
Sensor element	Liquid-filled coiled copper bulb for contact
Contacts	Microswitches with SPDT contacts (heat/cool)
Switch capacity	15 (8) A, 24...250 V AC
Ambient temperature	-35...+65 °C
Ambient humidity	10...90 % RH (non-condensing)
Storage temperature	-40...+70 °C
Storage humidity	< 95 % RH
Hysteresis	2...20 K
Casing	Bayblend® base, ABS cover
Weight	410 g
Protection class	IP65 class I
Isolation class	I
Dimensions	108 x 70 x 72 mm



DBAT-5U

Article	Temperature range	Max. bulb temperature	Hidden setpoint
DBAT-3	0...60 °C	75 °C	-
DBAT-3U	0...60 °C	75 °C	X
DBAT-5	20...90 °C	95 °C	-
DBAT-5U	20...90 °C	95 °C	X

FROST PROTECTION THERMOSTAT

High quality frost protection thermostats for use in cooling, heating and ventilation systems.

Technical data

Sensor element	
Contacts	SPDT microswitch
Switch capacity	15 (8) A, 24...250 V AC
Accuracy	± 1K
Ambient temperature	Max. 55 °C
Ambient humidity	10...90 % RH (non-condensing)
Storage temperature	-30...+60 °C
Storage humidity	< 95 % RH
Max. bulb temperature	150 °C
Casing	Base in ABS, cover in transparent Polycarbonate (PC)
Weight	340 g
Protection class	IP65
Isolation class	I
Dimensions	140 x 62 x 65 mm (cable gland included)

Article	Temperature range	Hysteresis	Reset	Capillary length
TF18	-10...+10 °C or +14...+50 °F	2 K	Automatic	1.8 m
TF18R	-10...+10 °C or +14...+50 °F	Manual minimal reset	Manual	1.8 m
TF30	-10...+10 °C or +14...+50 °F	2 K	Automatic	3 m
TF30R	-10...+10 °C or +14...+50 °F	Manual minimal reset	Manual	3 m
TF60	-10...+10 °C or +14...+50 °F	2 K	Automatic	6 m
TF60R	-10...+10 °C or +14...+50 °F	Manual minimal reset	Manual	6 m
TF150	-10...+10 °C or +14...+50 °F	Manual minimal reset	Automatic	15 m
TF150R	-10...+10 °C or +14...+50 °F	Manual minimal reset	Manual	15 m

ACCESSORIES

Article	Description
DBZ-01	Brass pocket 120mm, Ø external 11 mm, Ø internal 10 mm, connection R 1/2"
DBZ-02	Stainless steel pocket AISI 304, 120 mm, Ø external 12 mm, Ø internal 10 mm, connection R 1/2"



TF30



TF60R



TF18



DBZ-05

IMMERSION THERMOSTATS, IP 54

Temperature control in pipes for heating, cooling and air conditioning systems, boilers and heaters. Temperature monitoring and safety protection with manual reset (2 stages).



TV090



TV09090U

Technical data	
Sensor element	Copper bulb with 120 mm brass pocket (on request with 200 mm length)
Contacts	Microswitches with SPDT contacts (heat/cool)
Switch capacity	With SPDT contact: NC 250 V AC 16 (6) A / NO 250 V AC 6 (4) manual maximum reset: NC 250 V AC 16 (2,5) A / NO 250 V AC 0,5 A
Ambient temperature	-35...+65 °C
Ambient humidity	10...90 % RH (non-condensing)
Storage temperature	-20...+70 °C
Storage humidity	< 95 % RH
Casing	Bayblend® base, ABS cover (2 stage models: sealed ABS)
Weight	single stage: 440 g double range: 560 g
Dimensions	108 x 70 x 72 mm (2 stage models: 132 x 88 x 70 mm)
Protection class	IP54
Isolation class	I

Article	Temperature range 1	Temperature range 2	Hysteresis range 1	Hysteresis range 2	Max. bulb temperature	Function	Hidden setpoint
TV090	0...90 °C	-	4 ± 1 K	-	120 °C	with SPDT contact	-
TV090U	0...90 °C	-	4 ± 1 K	-	120 °C	with SPDT contact	X
TVR6585	65...85 °C	-	20 ± 5 K	-	125 °C	manual maximum reset (unit can be reset only if temperature drops below the setpoint minus the hysteresis)	-
TVR90110	90...110 °C	-	20 ± 5 K	-	125 °C	Manual maximum reset (unit can be reset only if temperature drops below the setpoint minus the hysteresis)	-
TV09090U	0...90 °C	0...90 °C	4 ± 1 K	4 ± 1 K	120 °C	With SPDT contact	X
TV090UR85	0...90 °C	65...85 °C	4 ± 1 K	20 ± 5 K	120 °C	manual maximum reset with SPDT contact (unit can be reset only if temperature drops below the setpoint minus the hysteresis)	-

ACCESSORIES

Article	Description
DBZ-30/14	Brass pocket 120 mm, Ø external 8 mm, Ø internal 7 mm, connection R 1/2"
DBZ-40/14	Brass pocket 108 mm, Ø external 16 mm, Ø internal 15 mm, connection R 1/2"
DBZ-31/14	Stainless steel pocket AISI 304, 120 mm, Ø external 9 mm, Ø internal 7 mm, connection R 1/2"
DBZ-41/14	Stainless steel pocket AISI 304, 120 mm, Ø external 16 mm, Ø internal 15 mm, connection R 1/2"



Note: the thermostats are supplied with standard pocket models DBZ-30/14 and DBZ-40/14.

IMMERSION THERMOSTAT, IP65

High quality immersion thermostats for use in cooling, heating and ventilation systems.



DBTV-16

Technical data	
Sensor element	Liquid-filled coiled copper bulb
Contacts	Microswitches with SPDT contacts (heat/cool)
Switch capacity	15 (8) A, 24...250 V AC
Ambient temperature	-35...+65 °C
Ambient humidity	10...90 % RH (non-condensing)
Storage temperature	-40...+70 °C
Storage humidity	< 95 % RH
Casing	Bayblend® base, ABS cover
Weight	440 g
Dimensions	108 x 70 x 72 mm
Protection class	IP65
Isolation class	I

Article	Temperature range	Hysteresis	Max. bulb temperature	Hidden setpoint
DBTV-1	-30...+30 °C	2...20 K	60 °C	-
DBTV-7U	0...60 °C	2...20 K	75 °C	X
DBTV-8	0...60 °C	1 K	75 °C	-
DBTV-11	50...120 °C	1 K	140 °C	-
DBTV-16	20...90 °C	2...20 K	100 °C	-
DBTV-17	20...90 °C	1 K	100 °C	-
DBTV-18	20...90 °C	manual maximum reset	100 °C	-

ACCESSORIES

Article	Description
DBZ-16/14	Brass pocket 120 mm, Ø external 10 mm, Ø internal 8,5 mm, connection R 1/2"
DBZ-17/14	Stainless steel pocket AISI 304, 120 mm, Ø external 10 mm, Ø internal 8,5 mm, connection R 1/2"



Note: the thermostats are supplied with standard pocket model DBZ-16/14.

The device can only be reset if the temperature falls below the setpoint minus the hysteresis.

POCKETS FOR THERMOSTATS

Pockets for thermostats in brass or stainless steel.

Article	Tube length	Total length	Outside diameter tube	Internal diameter tube	Connection (diameter)	Material	Fixing stopper
DBZ-01	120 mm	140 mm	11 mm	10 mm	R1/2"	Brass / Cu Ni	X
DBZ-02	120 mm	148 mm	12 mm	10 mm	R1/2"	Stainless steel EN 1.4301	X
DBZ-16	120 mm	140 mm	10 mm	8.5 mm	R1/2"	Brass / Cu Ni	X
DBZ-16/14	120 mm	140 mm	10 mm	8.5 mm	R 1/2"	Brass / Cu Ni	-
DBZ-17	120 mm	148 mm	10 mm	8.5 mm	R1/2"	Stainless steel AISI 304	X
DBZ-17/14	120 mm	148 mm	10 mm	8.5 mm	R 1/2"	Stainless steel EN 1.4301	-
DBZ-17/14/200	200 mm	228 mm	10 mm	8,5 mm	R1/2"	Acciaio inox AISI 304	X
DBZ-18	40 mm	61 mm	11 mm	10 mm	R1/2"	Brass / Cu Ni	X
DBZ-19	40 mm	68 mm	10 mm	8.5 mm	R1/2"	Stainless steel AISI 304	X
DBZ-30/14	120 mm	140 mm	8 mm	7 mm	R1/2"	Brass / Cu Ni	X
DBZ-40/14	108 mm	128 mm	16 mm	15 mm	R1/2"	Brass / Cu Ni	X
DBZ-41/14	120 mm	148 mm	16 mm	14 mm	R1/2"	Stainless steel AISI 304	X



For additional lengths of stainless steel versions contact Industrietechnik



DBZ-01



DBZ-02



DBZ-16-14



DBZ-17-14



DBZ-18



DBZ-19



DBZ-30-14



DBZ-31-14



DBZ-40-14



DBZ-41-14