



TEMPERATURE CONTROLS

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Discover precision and reliability with our Temperature Control solutions, designed to meet the diverse needs of modern industries. From advanced thermostats to cutting-edge climate management systems, ensure optimal operational conditions effortlessly.

PID TEMPERATURE CONTROLLERS

Autonics

Universal 4 Digit Temperature Controller



Control Relay + Alarm Relay	TK4S-14RN	TK4M-14RN	TK4L-14RN	TK4H-14RN	TK4W-14RN
4-20mA / SSR Output + Alarm Relay	TK4S-14CN	TK4M-14CN	TK4L-14CN	TK4H-14CN	TK4W-14CN
Control Relay + 2 Alarm Relay	TK4S-24RN	TK4M-24RN	—	—	TK4W-24RN
Size (H x W x D)	48 x 48 x 64.5mm	72 x 72 x 64.5mm	96 x 96 x 64.5mm	48 x 96 x 64.5mm	96 x 48 x 64.5mm

Features

- Simultaneous heating and cooling control function
- 4 digit 7 segment LED displays: PV (Process Value) Red, SV₁ (Set Point Value) Green
- SV₁ - SV₄ preset function using digital input terminals
- Indication accuracy of $\pm 0.3\%$ (F - S)
- TK4*-14CN** : Switch between current output and SSR drive output
- Input types : TC (J, K, R, S, T, N, C, L, U, E, G, Platinel II) RTD (PT50 Ω /100 Ω , Cu50 Ω /100 Ω , Nikel 120 Ω) 0-10V, 1- 5V, 4-20mA
- Control : ON/OFF, P,PI,PD & PID control

Specifications

- Multi-volt Supply : 100 to 240VAC
- Consumption : ≤ 8 VA
- Control Relay output : C/O 3A @ 250VAC
- Sample Rate : 50ms

COMPACT PID TEMPERATURE CONTROLLER

Autonics



Control Relay + Alarm Relay	TX4S-14R
4-20mA / SSR Output + Alarm Relay	TX4S-14C
Control Relay + 2 Alarm Relay	TX4S-24R
Size (H x W x D)	48 x 48 x 45mm

Features

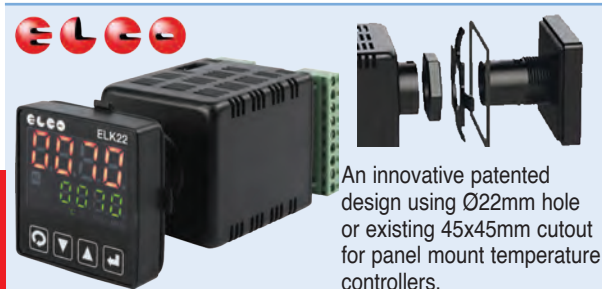
- 4 digit 11 segment LCD displays: PV (Process Value) White, SV (Set Point Value) Green
- SV using digital input
- TX4S-14C**: Switch between current output and SSR drive output
- Compact space saving design
- Indication accuracy of $\pm 0.3\%$ (F - S)
- Input types: TC (J, K, R, S, T, L) RTD (PT100 Ω , Cu50 Ω) DC 4-20mA or 0 - 20mA
- Control : ON/OFF, P, PI, PD, PID control

Specifications

- Multi-volt Supply : 100 to 240VAC
- Consumption : ≤ 8 VA
- Control Relay output : C/O 3A @ 250VAC
- Sampling Rate : 50ms

Ø22MM OR 45X45MM PANEL MOUNT TEMP. CONTROLLER

Stand Alone Panel Mount Controller



Code	ELK22S-*-R-2R
Supply Voltage	24VAC/DC, 100-240VAC
Control Mode	On/Off, PID Auto Tune
Process Display	4 Digit 12mm (Red)
Set Point Display	4 Digit 7mm (Green)
Sensor/Process input	J, K, PT100, PTC NTC, mA, mV, V
Output 1 (R)	SPDT C/O (6A@250VAC)
Output 2 (2R)	SPST N/O (6A@250VAC)
Size	49.5 x 49.5 x 108mm
Comms Port	—

* Add Supply Voltage to code:
24 (24VAC/DC), **240** (100-240VAC)

Modular DIN Mount Controller with Remote Display



Code	ELK22DKP	ELK22MS-*-R-2R
Supply Voltage	16VDC/20mA (from ELK22MS)	24VAC/DC, 100-240VAC
Control Mode	—	On/Off, PID Auto Tune
Process Display	4 Digit 12mm Red	—
Set Point Display	4 Digit 7mm Green	—
Sensor/Process input	—	J, K, S, PT100, PTC, NTC, mA, mV, V
Output 1 (R)	—	SPDT C/O (6A@250VAC)
Output 2 (2R)	—	SPDT C/O (6A@250VAC)
Size	49.5 x 49.5 x 110mm	98 x 35 x 64mm (2M DIN)
Comms Port	ModBus RS485	ModBus RS485



Accessories

Code	Description
FT6-20	Inter-connecting coupling cable length 20mm

* Add Supply Voltage to code: **24** (24VAC/DC), **240** (100-240VAC)

DIGITAL TEMPERATURE CONTROLLERS

Accuracy $\pm 0.25\%$
IP65 (Front), IP22 (Rear)



Code	ECOLITE-4-*2R	ECOPID-4-*2R-S**	ESM4430-**	ESM7730-**	ESM4435-**
Voltage	230VAC, 10-30VDC, 115VAC	230VAC, 10-30VDC, 115VAC	100-240VAC 24VAC/DC	100-240VAC 24VAC/DC	100-240VAC 24VAC/DC
Control Method	On/Off	On/Off, P, PI, PD, PID	On/Off, P, PI, PD, PID	On/Off, P, PI, PD, PID	On/Off, P, PI, PD, PID
PID Tuning	—	Auto / Manual	Auto / Manual	Auto / Manual	Auto / Manual
Process Display	3 Digit 16mm Red	3 Digit 16mm Red	4 digit 10mm (red)	4 digit 10mm (red)	4 digit 10mm (red)
Set Value Display	4 Digit 9mm Orange	4 Digit 9mm Orange	4 digit 8mm (Green)	4 digit 8mm (Green)	4 digit 8mm (Green)
Sensor Input	J, K, R, S, T, PT100	J, K, R, S, T, PT100	J,K,R,S,T,B,E,N,PT100	J,K,R,S,T,B,E,N,PT100	J,K,R,S,T,B,E,N, PT100
Process Inputs	N/A	N/A	N/A	N/A	0-50mV/5V/10V, 0/4-20mA
Process Supply	—	—	0-50mV/5V/10V,0/4-20mA	0-50mV/5V/10V,0/4-20mA	0-50mV/5V/10V, 0/4-20mA
Heating/Cooling	✓	✓	✓	✓	✓
Output 1	N/O Relay 5A@250VAC	N/O Relay 5A@250VAC	N/O Relay 5A@250VAC	N/O Relay 5A@250VAC	N/O Relay 5A@250VAC
Output 2	N/O Relay 5A@250VAC	N/O Relay 5A@250VAC	N/O Relay 5A@250VAC	N/O Relay 5A@250VAC	N/O Relay 5A@250VAC
Output 3	—	SSR (10mA@12VDC)	SSR (20mA@12VDC)	SSR (20mA@12VDC)	0/4-20mA / 0/2-10V
Output 4	—	RS485 (If option ordered)	—	—	—
Size	48 x 48 x 86.5mm	49 x 48 x 86.5mm	48 x 48 x 116mm	72 x 72 x 87.5mm	48 x 48 x 116mm

* Add Supply Voltage to code: **5** (230VAC), **6** (10-30VDC), **3** (115VAC)

** Add to code: **-485** (RS485 Comms) for **ECOPID** only

Features

- User friendly installation and operation
- Selectable Heating / Cooling functions
- Adjustment of temperature offset value
- Password Protection
- Adjustment of PID parameters (**ECOPID**)
- Selectable alarm functions (**ECOPID**)
- RS485 (Selectable at ordering (**ECOPID**))

** Add Supply Voltage to code: **240** (100-240VAC), **24** (24VAC/DC)

Features

- User friendly installation and operation.
- Universal Input TC, RTD + Analogue for **ESM4435**
- Automatic or manual PID tuning for greater control
- Adjustable PID cycle time for greater control
- Adjustable hysteresis for greater flexibility
- Text based Function menu for ease of set-up
- Dual Display of process temperature and set value
- Adjustable On and Off delay on alarms



Features

- Adjustable Process Offset Value
- Programmable ON/OFF, P, PI, PD, PID and PID Auto tune control types
- Programmable outputs - control or alarm functions can be selected for Outputs

Analogue control - Digital display temperature controller

Code	EDS9950-N*
Supply voltage	24VAC/DC, 115VAC, 230VAC
Control Method	ON/OFF, PID
PID Tuning	Auto / Manual
Display	4 Digit 10mm (Red)
Sensor Input	J, K, R, S, PT100(2 or 3 Wire)
Process/Alarm Output1	1x C/O (7A @ 250VAC)
Process Output2	SSR driver (10mA/12V)
Size	96 x 96 x 96mm
Panel Cut-Out	92 x 92mm

* Add supply voltage to code: **24** (24VAC/DC), **115** (115VAC), **230** (230VAC)

- If Process Output Type is chosen as Relay (Output 1) , SSR (Output 2) will be passive and Output Control Type will be ON/OFF Control.
- If Process Output Type is chosen as SSR (Output 2), Relay Output will be set as Alarm Output and any one of the Output Control Types can be chosen.

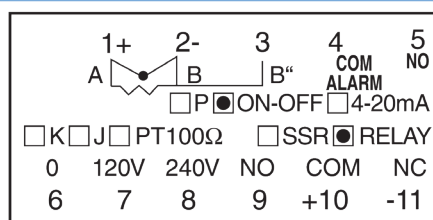
TEMPERATURE CONTROLLERS

ON/OFF Control	Analogue Setting	Analogue Setting & Deviation Display	Analog Setting & Full Scale Display		Thumbwheel Setting & Digital Display	
Size 96 x 48	—	—	—	—	—	KE-861*
Size 72 x 72	KE-714*	KE-724*	—	KE-742*	KE-771*	—
Size 96 x 96	KE-612*	KE-622*	KE-632*	KE-642*	KE-671*	—
c/w Alarm Contact	—	—	—	—	KE-771-A*/KE-671-A*	KE-861-A*
Range & Probe	*Add temperature 100, 200, 400 or 600°C and Probe type PT100., J or K e.g. KE-724 200K					
Higher Range 'K'	—	—	800 & 1200°C		—	—

Technical Specifications

Supply:	110/220VAC	Output:	Relay 1C/O
Input:	Thermocouple K, J and PT100		5A@250V
Accuracy:	1% of full scale	Hysteresis:	2,5% full scale
Control:	On/Off action	Alarm:	10% of full scale

Connection Diagram

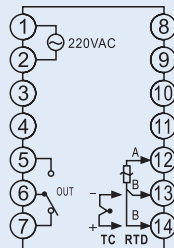


	Digital DIP Switch Setting	Digital Dial Switch Setting		Thumbwheel 1 Set Point	Analogue 1 Set Point	Digital
			ON/OFF Control			
Size	72 x 72mm	72 x 72mm		48 x 48mm	48 x 48mm	34 x 76mm
Size 72 x 72mm	TCD-M-1*	TCR-M-1*	Probe PT100	TP-48*P	TR-48*P	MTR11-150PTC*
Size 96 x 96mm	TCD-L-1*	TCR-L-1*	Probe J & K	TP-48*J	TR-48*J	—
Range & Probe	*Add temperature 100, 200, 400, 1200 (K-Type only) and Probe type PT100, J or K e.g. TCD-M-1-200K			TP-48*K	TR-48*K	—

Technical Specifications

Supply : 230VAC
Power consumption:
under 5VA
Input:
Thermocouple:
K, E, J
RTD PT100 and Cu50Ω
Accuracy: ±5%
Control: ON/OFF (Heating)
Output : Relay 1N/O & 1 N/C,
5A @250VAC
Hysteresis:
Sampling Rate: 100ms

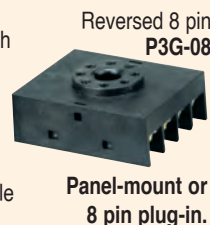
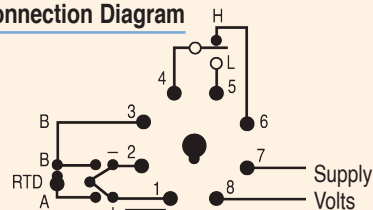
Connection Diagram



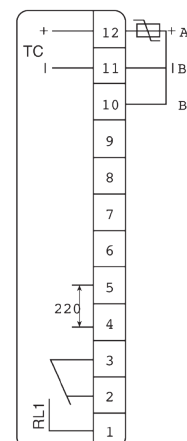
*Add temperature 100, 200, 400°C
*Add temperature 200, 400°C

All supplied complete with
Y-50 mounting bracket
Specifications:
Supply voltage:
110-240VAC
Hysteresis: 2,5% full scale
Relay output:
1 C/O 2A@250VAC

Connection Diagram



• Supply: 230VAC
• C/W Probe
Range: 50-150°C
Spare Probe: PTC150



TEMPERATURE INDICATORS

	Indicator	Indicator	5 Sensor Input Indicator	Indicator	Indicator	
Code: PT100	T3NI-400P	T4YI-400P	T4WM-400P	MTR10-599P	SG-781*P	SG-681*P
Code: J	—	T4YI-500J	T4WM-500J	MTR10-999J	SG-781*J	SG-681*J
Code: K	—	T4YI-1200K	T4WM-1200K	MTR10-999K	SG-781*K	SG-681*K
Size	24 x 48mm	36 x 72mm	48 x 96mm	34 x 76mm	72 x 72mm	96 x 96mm
Supply Volts	12-24VDC	100-240VAC	110-240VAC	230VAC	110-230VAC	
Temperature Range	—	—	—	—	*Add Temp Range to code: 100, 200, 400°C	

	Temperature Indicators		Large Display	Glass Thermometer
Code	TKTZ	DT-101S	TH-922	CS-120
Range	-50 to +99°C	-40 to +70°C	0-100°C	0-120°C / 20-180°F
Supply	230VAC or 115VAC	Battery included	85-265VAC	-
Probe	PTC20 (included)	1.1m cable (included)	TC-P 100D	-
Size (mm)	62(W) x 29(H)	48(W) x 28(H)	200(H) x 395(W) x 100(D)	1/2" BSP - 150mm (L)

SCR HEATER ELEMENT REGULATORS

Voltage Control for Heaters Single Phase (230V)

Code	Current	KW	Ultra fast Fuse	Code	Current	KW	Ultra fast Fuse
SG-027	27A	6	30A	SG-100	100A	22	100A
SG-057	57A	12.5	60A	SG-132	132A	29.3	160A
				SG-162	162A	36	160A

Three Phase (400V)

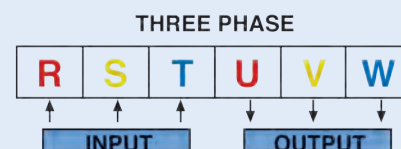
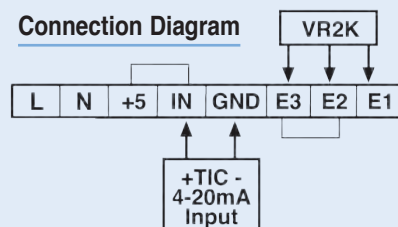
Code	Load Current	KW	Ultra fast Fuse	Code	Load Current	KW	Ultra fast Fuse
SG-325	25A	16.5	25A	SG-3100	100A	66	100A
SG-350	50A	33	50A	SG-3130	130A	86	160A
SG-375	75A	49	75A	SG-3160	160A	105	160A

Specifications

Input Signal: 4-20mA, 0-20mA, 1-5VDC, 0-5VDC
Control System: Phase control
Insulation Resistance: 500VDC (10g ohms)

Output Voltage: 0-100%
Constant- Voltage Characteristics: Output accuracy 1%
Ambient Temperature: -10/50°C Humidity 90% RH below
VR1: Min V output Ads.
VR2: Max V output Ads.

Connection Diagram



Benefits

- Small size, saving space
- High accuracy and fast response
- Eliminates contactor noise
- Extends heater life
- High efficiency, no maintenance
- Maintains stable process temperature

DIGITAL DEFROSTING & TEMPERATURE CONTROLS

Temperature Controllers for Walk-in Freezers and Cooling Displays

Size: 71 x 28 x 71mm
Cut Out: 71 x 29mm
Display: 3 Digit/Sign



Code	TC-900RI-CL	TC-900RI-P	TC-920RI	TC-940RI-P
Range	-50 to 75°C	-50 to 75°C	-50 to 75°C	-50 to 75°C
Supply	115 or 230VAC ±10%	90-264VAC	115 or 230VAC ±10%	115 or 230VAC ±10%
Probe	2 x SB19 NTC Sensor (Inc.)	2 x SB19 NTC Sensor (Inc.)	3 x SB19 NTC Sensor (2 Inc.)	2 x SB19 NTC Sensor (Inc.)
Relay Output	N/O 5A Refr N/O 5A Fans N/O 5A Defrost	N/O 16A Comp N/O 5A Fans N/O 8A Defrost	N/O 5A Refr N/O 5A Fans N/O 3A Defrost	N/O 16A Comp 3A N/O Alrm N/O 5A Defrost N/O 5A Fans
Coms / Software Req.	Yes / SITRAD	No / -	No / -	Yes / SITRAD
Application	Refrigeration	Refrigeration	Refrigeration / Frozen Food	Refrigeration
Features	- Dual sensor - Real time clock - Up to 8 defrost / day - Internal battery - Serial communication	- Dual Sensor - Large compressor switching capacity	- Three Sensors - Digital input for door monitor or defrost control - Power saving function	- Energy saving through intelligent defrost control - Alarm output - Digital input - Sensor response time control - Serial Communication

Refrigeration / Temperature Controllers

Size: 71 x 28 x 71mm
Cut Out: 71 x 28mm
Display: 3 Digit/Sign



Code	TC-900E-2HP	MT-512E-LOG	TC-900RG2	RT607E-PLUS
Range	-50 to 105°C	-50 to 105°C	-50 to 75°C	-50 to 105°C
Supply	115 or 230VAC ±10%	115 or 230VAC ±10%	115 or 230VAC ±10%	115 or 230VAC +10%
Probe	2 x SB19 NTC Sensor (Inc)	1 x SB19 NTC Sensor (Inc)	2 x SB19 NTC Sensor (Inc)	1 x SB19 NTC Sensor (Inc)
Relay Output	C/O 12(8)A Comp N/O 10A Defrost, N/O 5A Fans	N/O 16A (12A) (2HP) N/C 2A (0,1HP)	N/O 16A Comp N/O 5A Fans, N/O 8A Defrost	NO 16A (12A) Temp Control C/O 10A (0,25Hp) Event
Coms / Software Req.	Yes / SITRAD	Yes / SITRAD	No / -	Yes / SITRAD
Application	Refrigeration	Refrigeration / Heating	Beverage Freezers	Air Conditioning / Water Heaters / Defrost Control
Features	- Fast freezing - Economic Setpoint	- Serial communication - Datalogging - Sensor response time control - Digital input IP65 Front panel - Function lock	- Easy set-up using supplied preset selector - 9 preset configurations - Dual Sensor	- Temperature Controller combined with time sheduler - Parameters for recirculation & protection of water heaters - Up to 8 daily events - Manual load activation

Temperature Controls

Size: 71 x 28 x 71mm
Cut Out: 71 x 28mm
Display: 3 Digit/Sign



Code	MT-516EVT-PLUS	MT519E	MT-530SUPER*
Range	-50 to 200°C	-50 to 200°C	-10 to 70°C
Supply	115 or 230VAC ±10%	100-240VAC	115 or 230VAC / *12-24V AC/DC
Probe	1 x SB19 NTC Sensor (Inc)	2 x SB19 NTC Sensor (Inc)	1 x SB56 NTC Temperature and Humidity Sensor (Inc)
Relay Output	N/O 16A (8A) Load 1 N/O 16A (8A) Timed	C/O 16A (8A) Out1 C/O 16A (8A) Out2	3 x N/O 5A Temp/Humidity/Aux
Coms / Software Req.	Yes / SITRAD	Yes / SITRAD	Yes / SITRAD
Application	Milk Cooling / Heatpumps	Boilers / Air conditioning / Heaters	Data Centres / Air Conditioning / Grain Drying
Features	- Cyclical timer: 1-999 sec/min - True RMS voltage monitoring with over/under voltage protection - Serial communication - Timed output can also be configured as an alarm output or second stage of cooling or heating	2 Independant thermostats - Alarm contact - Buzzer - Cyclical timer - Function lock - Serial communication IP65 Front panel	- Convenient integrated sensor - Serial Communication

POWER MONITORS

Instrument for measuring and monitoring the major parameters regarding energy quality on three-phase electrical installations



Code	PHASE LOG PLUS
Supply	85 - 265VAC
Control Range	90-500VAC
Current	5A/ 250VAC 1/8hp
Dimensions	71 x 28 x 71mm
Communication	RS-485
Application	Electrical panels and multi-phase equipment
Features	• TRMS Over/ Under voltage Protection (Adjustable) • Phase Failure & Phase Sequence & Assymetry Protection • Data Logger Per Phase • Real Time Clock

TEMPERATURE DISPLAY

Defrost function through compressor stop and permanent ventilation. Long distance visualization.



MT-512G

115 or 230VAC $\pm 10\%$
-55 to 90°C
N/O 16A (8A)
105 x 50 x 44mm
No
For walk-in and display coolers, can be set up for display only.

Remote Management Software

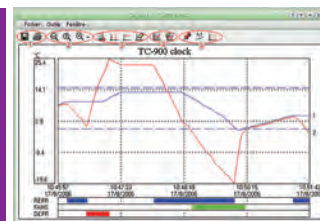
Code SITRAD

More than just automation, sitrad innovates in the management of cooling, heating, air conditioning, and solar heating systems by means of its most distinguishing feature: connectivity. The user can continuously evaluate, configure and store data on temperature, humidity and pressure, among others

- **Local:** must be installed in the computer to which the instruments are connected via interface
- **Remote:** must be installed in the computer that will remotely manage the installation, via Internet
- **Mobile:** manages facilities via cell phone, communicating with the local module

With mobile, the user has another option for remote management. Without using a computer, it provides even easier remote installation management. It is the connectivity allowing to take over the control, anytime, anywhere.

SITRAD Software is free to download (www.sitrad.com). Also see test/trial on the same website.



CONTROLLERS FOR SOLAR SYSTEMS

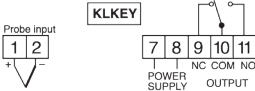
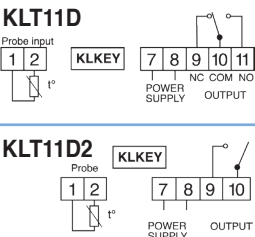
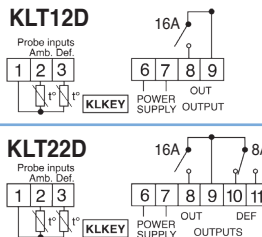
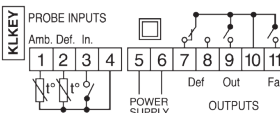
Differential Temperature Controllers for Pumped Solar Heating Systems

Code	ANASOL	MICROSOL RI* V6	MICROSOL II *PLUS
Features	Economical differential temperature controller used to control the pump of solar water heating applications. • Anti-Freeze or Overheating protection • Manual pump control function	Differential thermostat for automation of pumped solar heating systems. • Anti-Freeze and Overheating protection	Differential temperature controller for automation of pumped solar heating systems. • Anti-Freeze, Overheating protection and solar back-up functions. • Built in time switch allows for up to 4 daily events (c/w Battery Back-up)
Supply	115 or 230VAC $\pm 10\%$	115 or 230VAC or * Add "L" for 12-24VAC/DC	115 or 230VAC or * Add "L" for 12-24VAC/DC
Control Range	-50 to 105°C	-50 to 105°C	-50 to 105°C
Load Current	C/O 16A (8A)	C/O 16A (8A)	3 x N/O 5A (3A)
No. of Sensors IP's	2 x SB59 Colour Coded	3 x SB59 Colour Coded	3 x SB59 Colour Coded
Dimensions	100 x 72.8 x 36.8mm	71 x 28 x 71mm	71 x 28 x 71mm
Connection Diagram			
			Coms = RS485 Software = SITRAD

TEMPERATURE CONTROLLERS IP64

Size: 76 x 36mm
Cutout: 71 x 29mm
Display: 3 Digit + Sign



Code	KLT11BB-J (J Probe) KLT11BB-K (K Probe)	KLT11D	KLT11D2	KLT12D	KLT22D	KLT32
Range	J = 0 to 700°C K = 0 to 999°C	-50 to 150°C				
Supply	230VAC, 110VAC	230VAC, 110VAC, 24VAC/DC or 12VAC/DC to be specified				
Probe (excluded)	J or K Probe Program Selectable	PTC or NTC Program Selectable		PTC or NTC Program Selectable		PTC20±2°C / PTC05±0.5°C
Output relay	1 Relay C/O 16A	C/O 16A	N/O 20A	N/O	16A N/O Control 8A C/O Defrost	N/O 16A Control, C/O 5A Defrost, N/O 8A Fan
Function	Control	Control		Control	Control & Defrost	Control for compressor, fan & defrost
Alarm	2 Alarm set points	—	—	—	—	—
Communication Card Output (KL-KEY)	Yes	Yes	Yes	Yes		Yes
Connection Diagram						
Specifications	- Cooling or heating - Inside alarm buzzer - Accuracy 1%	- Cooling or heating - High & low value set point		1 or 2 Probe selectable - Designed for refrigeration - Able to program 23 different parameters, i.e. hysteresis, defrost time		1 or 2 Probe selectable - Designed for refrigeration - Able to program 52 different parameters, i.e. hysteresis, defrost time

Accessories (Probes c/w 1.5m cable)

Code	Description
PTC20	PVC Cable. Accuracy ± 2°. Range -50°C / 105°C
PTC05	PVC Cable. Accuracy ± 0.5°. Range -50°C / 105°C
NTC20	PVC Cable. Accuracy ± 1°. Range -50°C / 105°C

HUMIDITY CONTROLLERS

TEMPERATURE & HUMIDITY CONTROLLER



IP65



Code	DPM-RH-*	KLH11RH
Size	72 x 72 mm	76 x 36 x 60D mm
Supply	110VAC or 230VAC	110VAC or 230VAC
Input*	4-20mA (VN8736) / 1-3V	0-1V, 1-3V KLSH03
Range	0-100% RH	0-100% RH
Settings	Hysteresis Adj.	Differential or Hysteresis
Output	Relay C/O 8A	Relay C/O 8A



Code	KLTH43
Size	134 x 105mm
Cutout Size	130.5 x 100.5mm
Supply	230VAC
Temp. Range	-50°C to 150°C (0.5%)
Hum. Range	0-100% RH (5%)
Probes (excluded)	Temp 2 x PTC05 ±0.5% or PTC20 ±2% Humidity 1 x (0-1V) / (0-3V) 4-20mA probe
Outputs	4 SPDT Relays 8A @ 250VAC
Display	Red for temperature; Green for humidity

Features

- Red display for temperature and green display for humidity
- Temperature control can be ON/OFF, neutral zone or refrigeration
- Second temperature probe can be used for defrosting control
- Humidity control can be ON/OFF or neutral zone.
- Humidity probe (0-1V) / (0-3V) / (4-20mA) selectable by programme
- Resolution: Temp: 0.1°C Humidity: 1%

HUMIDITY & TEMPERATURE SENSORS

	Humidity Sensors		Combined Humidity & Temperature Sensors			
	IP30	1.5m cable length			1.5m cable length	
						
	Code	VN8736	KLSH03	TH-102W	TH-101D	TH-103S
	Supply Voltage	9-30VDC / 12-24VAC	5VDC	12/24VDC	12/24VDC	12/24VDC
Range	20-90% RH	10-90% RH	0-100°C / 0-100%RH	0-100°C / 0-100%RH	0-100°C / 0-100%RH	
Output	4-20mA or 0.1-1V	1 to 3VDC	4-20mA (2-wire)	4-20mA (2-wire)	4-20mA (2-wire)	

Combined Humidity & Temperature Sensors

						
	Small Size: 40 x 79 x 16mm					
	Duct Mount c/w 59mm Probe		Wall Mount			
	Code	PMI-P-H0/T0	PMD-D-H0/T0-101	PMD-D-0/0-111	PMD-W-H0/T0-100	PMD-W-0/0-110
	Supply Voltage	16-32VDC	16-32VDC		16-32VDC	
	Range	-20 to +80°C / 0-100%RH	-20 to +80°C / 0-100%RH		-20 to +80°C / 0-100%RH	
	Output	4-20mA (2-wire)	4-20mA	RS485 comm.	4-20mA	RS485 comm.

TEMPERATURE & HUMIDITY INDICATORS

			Indoor Thermometer		In/Outdoor Thermometer
Code			WS1170		
• Display: in °C or °F • Temperature Ranges: Indoor: 0°C to 60°C (built in) Outdoor: -40°C to 65°C (wireless x1) • Humidity Range: 1%RH-99%RH • Accuracy: ±1°C - Battery: 3 x 1.5V AA (excluded) - Sensor: 2 x 1.5V AAA (excluded)					
Temp. & Humidity Indicator			Code		TH-920
• 0-100°C Temp • 0-100% Humidity • Supply 85-265VAC • Sensor TH-101/2/3 or VN8736 (see above) • Input: 4-20mA • Digit size mm: 100H x 60W			CTH-608		CTH-609
			Wall or Table mount (back stand built-in)		
Size mm: 360H x 395W x 100D			Memory store and recall of max/min temp. and humidity		
			Clock: 12/24hr Format, Alarm, Calendar Function		
			Battery: 1 x AAA size (included)		
			LCD Size 80 x 70mm		
			Temperature Display in "C" or "F" selectable		
			Range: -50°C to 70°C ±1°C -58°F to 158°F±1.8°F		Range In: -10°C to 50°C ±1°C -14°F to 122°F±1.8°F
					Outdoor: -50°C to 70°C ±1°C -58°F to 158°F±1.8°F
					Frost Warning: -1 to 4°C
			Humidity: 10% to 99%RH±1%		Humidity: 20% to 99%RH±1%

THERMOSTATS

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Clima – Series 6-30°C (Surface mount)

Code	Contact Rating	Control
CLIMA ML	16A	Heating / Cooling
CLIMA MLI	10A	Heating / Cooling + on/off switch
CLIMA MLW	10A	Heating / Cooling + Manual Heating / Cooling Switch
CLIMA FC	10A	Heating / Cooling + Manual Heating / Cooling Switch + Fan Speed Switch

Vemer
SPA



Rio – Series 6-30°C (Surface mount)

VN650800	15A	Heating only
VN652400	10A	Heating/Cooling + on/off switch
VN653200	10A	Heating/Cooling + on/off switch + on lamp

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Digital Room Thermostats 5-35°C (Surface Mount)

NEO-ML	5A	Heating only - Battery Powered (2 x AAA not included) Connection for underfloor heating probe OB320055 (order probe Separately)
THALOS	5A	Heating only - Battery Powered (2 x AAA not included) Large, Blacklit Touch Screen for Easy Reading & Control. Terminal for time switch input to decrease temperature at night.

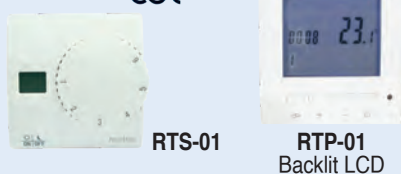
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Thermostats - c/w Timing Functions

LYRA	5A	Heating and cooling with comfort & saving settings. Daily timing (minimum 15min interval). Surface Mount. Temperature range 10 - 40°C
DECO-CRONO	8A	Heating and cooling with 2 temperature settings and anti-ice setting. Weekly timing with 8 programs. Mounts into 75 x 75mm box. Temperature range 2 - 55°C.

zamel cat



Underfloor Heating Thermostat - (Flush Mounting in 3x3 Wall Box)

RTS-01	16A	Heating only - Analogue controller -5°C to 40°C. c/w NTC Probe & Air Temp. Sensor
RTP-01	16A	Digital controller Temperature Range: 5°C to 45°C. c/w NTC probe & Air Temp. Sensor. Program up to 4 Temperature/Time Settings per day

Room Thermostats 10-30°C



A7700	16A	Heating only 10 - 30°C with on/off 20A isolator mounting into standard 4 x 2 box. Max switching 3600W
BEL4118-A2	16A	Heating only 10-30°C with on/off switch mounting into 75 x 75mm box
BEL4118-B1	16A	Heating only with on/off switch mounting into 75 x 75mm box c/w remote sensor with 3m cable, adj between 10 - 50°C.
BEL4118-E1	16A	LCD Electronic Thermostat. heating only 10-30°C with 7 day timer programmable. 6 times, 6 temperature settings per day. Remote sensor with 3m cable
BEL-B1	–	75 x 75 x 32(D)mm Flush Mount Wall Box
BEL-B2	–	86 x 86 x 32(D)mm Surface Mount Box

TG



Thermostats for Air Conditioning Systems (Surface Mount)

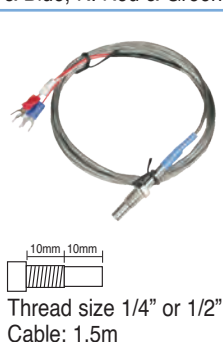
Temperature Control 10-30°C

BEL-3538/03A	5A	3 Speed Fan Switch with 10-30°C Temp. Control and on/off switch
BEL-3538/03LA	5A	As BEL-3538/03A with Digital Temp. Display

TEMPERATURE PROBES

Thermocouples

NOTE: Wire Colours - J: Red & Blue, K: Red & Green, PT100: 2 x White, 1 x Red



Probe Type	Thermo-couple Type	Temp Range	Cable Type	Screw Type Code	Temp Range	Code	Description	Head Type Code	Large Head Code	Com-pression Clamp
PT100	TC-P 100D Std 1/4" thread	100°C	PVC	TC-P/S*	400°C	TC-P2 CABLE	200°C PVC coated Grey	KSE-P	KEN-P	1/2" Brass CC-02B
PT100	TC-P 200D*	200°C	PVC			TC-P4 CABLE	400°C Steel braided			1/4" Brass CC-04B
PT100	TC-P STEEL Std 1/4" thread	400°C	Steel							1/2" S/Steel CC-02S
Type J	TC-J*	400°C	Steel	TC-J/S*	400°C	TC-J CABLE	400°C Steel braided	KSE-J	KEN-J	CC-02S
Type K	TC-K*	400°C	Steel	TC-K/S*	400°C	TC-K CABLE	400°C Steel braided	KSE-K	KEN-K	1/4" S/Steel CC-04S

*Specify 1/4" or 1/2"

*Specify 1/4" or 1/2"

RHOMBERG



Temperature Transmitter (2 wire) - Fits into Head Type KEN-P/J/K

Code	Temperature Range
TRT-PT100*	50, 100, 150, 200, 400°C
TRT-J*	100, 150, 200, 400, 600°C
TRT-K*	100, 150, 200, 400, 600, 1000, 1200°C

*Add Temperature range to code

Specifications

Output Signal: 4 - 20mA DC
Power Supply: 10 - 36VDC
Accuracy: $\pm 0.15\%$ F.S. (PT100)
 $\pm 0.5\%$ F.S. (J & K)v

Thermocouple Connectors



Female	Male
FPL-PT100	MPL-PT100
FPL-J	MPL-J
FPL-K	MPL-K

NEW

SMART WiFi THERMOSTAT IP20



Designed To control Electric underfloor heating in commercial / industrial / civil and domestic property

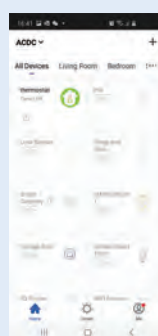


Smart WiFi Thermostat

Code	BHT-002-GBLW
Power Supply	95 ~ 240 VAC, 50 Hz
Current Load	16A
Sensor Type	NTC (Temp. sensor)
Dimensions	86 x 86mm
Set Temp. Range	0-35°C

Features

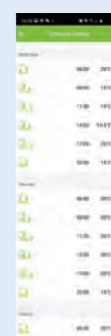
- Unlimited options to add rooms and support scenes
- Devices can be grouped with centralized control
- $\pm 0.5^\circ\text{C}$ Accuracy keeps temperature within the level you set.
- Keeps memory of program even when power is off
- Floor Sensor (Included)
- User friendly and easy to program
- Separate schedules may be set for weekdays (Mon – Fri) and for weekends (Sat or Sun) with 6 time slots daily.



App Home



Programmable Mode



Schedule



WiFi Control



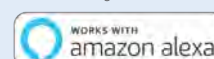
App Control



Remote Switching

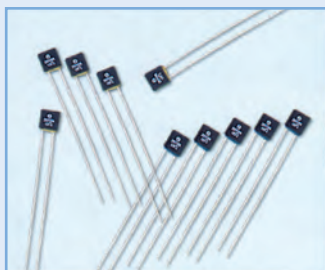


Set Timers & Schedules

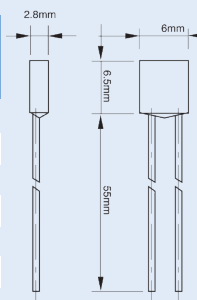


OVER TEMPERATURE SWITCHES

Thermal Cut-Offs - AC Voltage: 250VAC



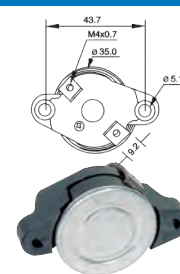
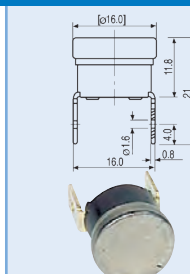
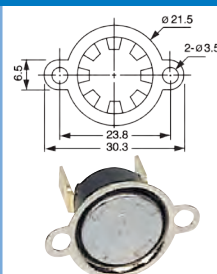
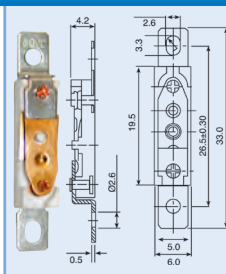
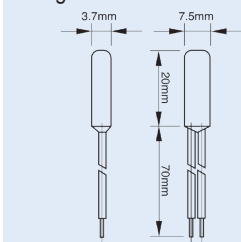
Code 2A	Code 3A	Rated Functioning Temp. Tf (°C)	Fusing-Off Temp (°C)	Holding Tc (°C)	Max Temp Limit Tm (°C)
RH01D2-100	RH01D3-100	100	97+2/-3	70	150
RH01D2-110	RH01D3-110	110	105±3	75	180
RH01D2-120	RH01D3-120	120	115±3	80	180
RH01D2-125	RH01D3-125	125	120±3	95	180
RH01D2-135	RH01D3-135	135	132+3/-5	105	180
RH01D2-142	RH01D3-142	142	138±3	110	180
RH01D2-150	RH01D3-150	150	145±3	115	180



Code 15A	Rated Functioning Temp. Tf (°C)	Fusing-Off Temp (°C)	Holding Tc (°C)	Max Temp Limit Tm (°C)
TH-84	84	80±2	55	150
TH-105	105	101±3	70	150
TH-121	121	119+2/-3	90	180
TH-133	133	130±3	100	180
TH-152	152	149±3	115	200
TH-172	172	170±2	140	200
TH-192	192	190+2/-5	165	220

OVER TEMPERATURE SWITCHES (THERMOSTATS)

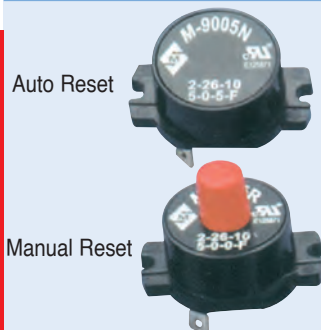
Voltage: 250VAC



Code	N/C N/O	KSD-9700*	CK1*	B-1002B * B-1002B 80/NO	B-1002N *	B-2002 *
Contact Amps @ 250V		5A	5A	10A	10A	30A
Reset Differential		30°C	25°C - 55°C	10°C - 40°C	10°C - 40°C	10°C - 40°C
Reset		Auto	Auto	Auto	Auto	Auto
*Temperature		60, 80, 100, 120, 140°C	60, 80, 100, 120, 140°C	60, 80, 100, 120, 160°C	80, 100, 120°C	80, 100, 120°C

*Add temperature required to code

Motor Protection Cut-Outs - Voltage Rating: 250VAC • UL Approval



Code Auto Reset	Code Manual Reset	KW/HP	Full Load Current	Locked Rotor	
				Current	Trip Time
M95-025-A	M95-025-M	0.25/0.5	4.9A	26A	5-15sec
M95-05-A	M95-05-M	0.5/0.75	6.9A	39A	5-15sec
M95-75-A	M95-75-M	0.75/1	8.0A	52A	5-15sec
M95-11-A	M95-11-M	1.1/1.5	10.0A	65A	5-15sec
M95-15-A	M95-15-M	1.5/2.0	12.0A	78A	5-15sec

Circuit Breaker for Equipment



Code TR40

- Current Rating in (Amp): 16A @ 240V
- Overload Switching Capacity: 3x In~
- Operating Temperature: Max. 55°C Ambient

Operation

The Circuit Breaker uses a bimetal snap disc for operating a contact mechanism which opens the circuit in case of overload with inverse-time characteristics