

Diamant CLIMA

ON/OFF ACTUATORS WITH TEMPERATURE PROBE AND BUILT-IN ELECTRONIC THERMOSTAT

Compact CLIMA

USE

- industrial plants
- heating / cooling systems
- all applications which require the operation of a valve according to the detected temperature



OPERATION

The **Diamant CLIMA** and **Compact CLIMA** actuators are controlled microprocessor which allows to intercept or deviate the fluid according to the temperature detected by the probe. The semiconductor temperature probe, connected to 80 cm-long cable, detects the temperature of the pipeline. The value at which the servo-motor actuator shall start and the operation it shall perform are set on the integrated digital display.

When a given temperature is reached, the valve can be opened or closed, or it is possible to make it deviate the fluid flow from one way to another, in case of a three-way valve. The operating temperatures vary from -15°C to +85°C with a +/- 1°C accuracy.

By means of the display it is possible to set a hysteresis value (-15°C / +15°C) between the set-point value, at which the switching takes place, and the reset temperature.

TECHNICAL FEATURES	Diamant CLIMA	Compact CLIMA
Power supply	230V • 24V 50/60Hz (110V a richiesta)	
Maximum power consumption	8,9 VA (230V) • 9,4 VA (24V)	10 VA (230V) • 10,6 VA (24V)
Operating torque	11 Nm	22 Nm
Operating time (90° rotation) *	35 sec	45 sec
Probe and feeder cable length	80 cm	
Rotation	90°	
Protection degree	IP67	
Operational room temperature	-10°C to +50°C	
Temperature sensing field	-15°C to +85°C	
Temperature probe	Contact-type, NTC 10kΩ, total length 1,6 m	
Connection with ball valve	COMPARATO • ISO 5211 F03/05	ISO 5211 F03/05
Precision	± 1°C	
Maintenance	None	
Certification	CE	

* More operating times available upon request



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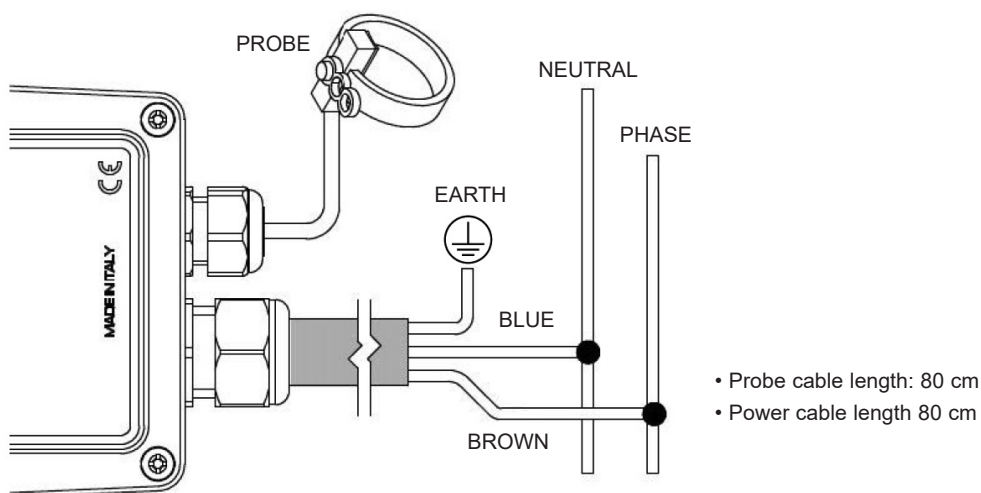
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Compact CLIMA

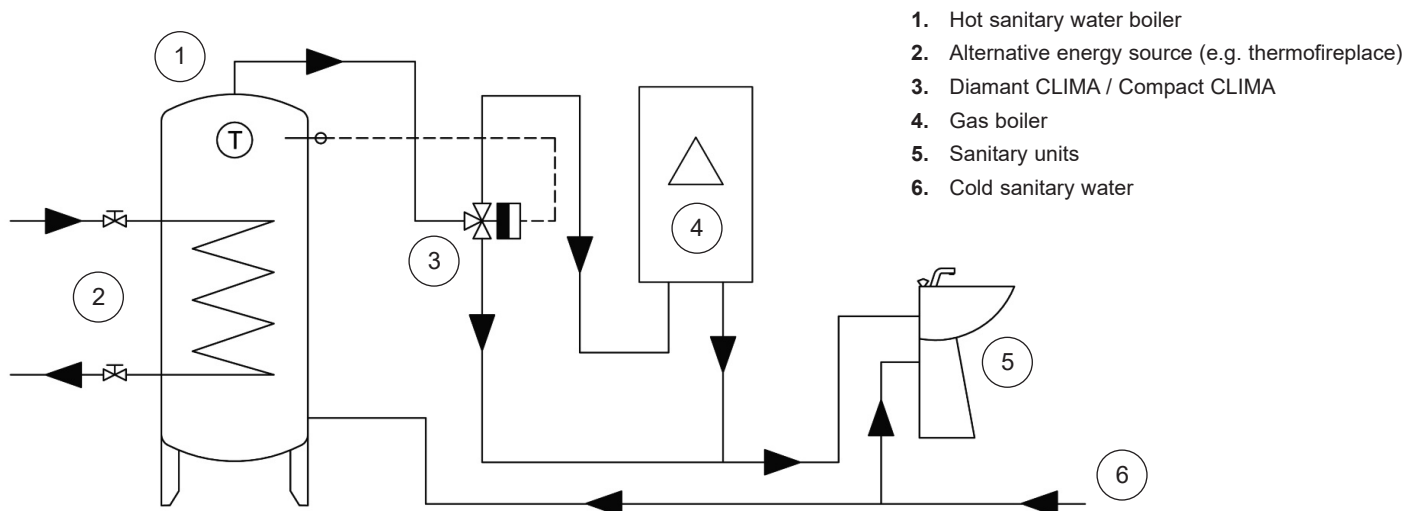
VERSIONS

Type of CONNECTION	Torque	Rotation angle	Operating time	Power supply	Base code
Diamant CLIMA COMPARATO connection	11 Nm	90°	35 sec	230V 50/60 Hz	CLIMA230D
	11 Nm	90°	35 sec	24V 50/60 Hz	CLIMA24D
Diamant CLIMA ISO 5211 connection	11 Nm	90°	35 sec	230V 50/60 Hz	CLIMA230DF
	11 Nm	90°	35 sec	24V 50/60 Hz	CLIMA24DF
Compact CLIMA	22 Nm	90°	45 sec	230V 50/60 Hz	CLIMA230C
	22 Nm	90°	45 sec	24V 50/60 Hz	CLIMA24C

ELECTRICAL CONNECTIONS



APPLICATION EXAMPLE



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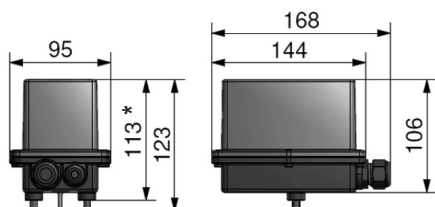
Diamant CLIMA

ON/OFF ACTUATORS WITH TEMPERATURE PROBE AND BUILT-IN ELECTRONIC THERMOSTAT

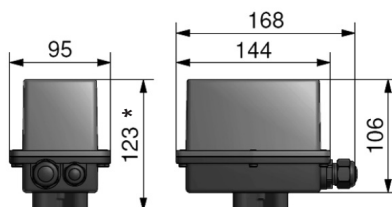
Compact CLIMA

OVERALL SIZE

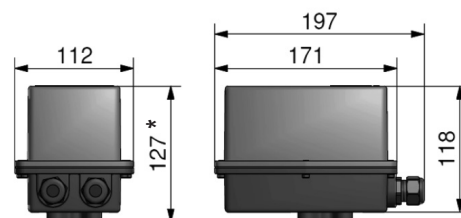
Diamant CLIMA COMPARATO connection



Diamant CLIMA ISO 5211 connection



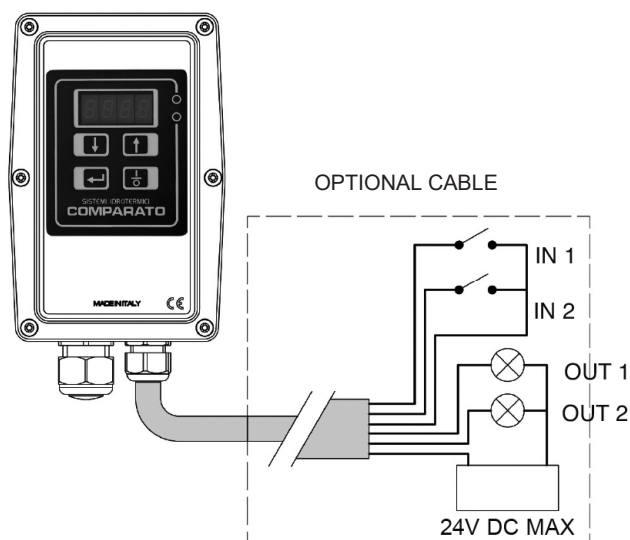
Compact CLIMA



* the size is to be taken into account when coupling the actuator to the ball valve.

ACCESSORIES

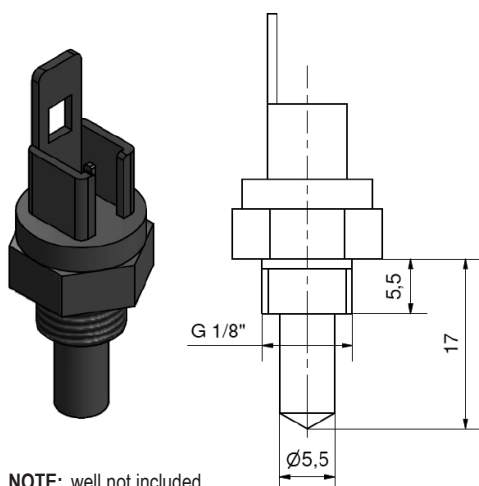
OPTIONAL INLETS/OUTLETS CABLE • Add "8" to the end of the code



INLET	FUNCTION	DESCRIPTION
1	Force in OPENING	By closing the inlet, the motorized valve moves in the opening position. The display will show the "Man" notice.
2	Force in CLOSING	By closing the inlet, the motorized valve moves in the closing position. The display will show the "Man" notice.
OUTLET	FUNCTION	DESCRIPTION
1	Signal valve OPEN	The outlet is activated (contact closing) when the valve is in an opening condition.
2	Signal valve CLOSED	The outlet is activated (contact closing) when the valve is in a closing condition.

NB: The addition of the optional inlet/outlet cable does not guarantee the maintenance of the IP 67 protection degree. For further information please contact our Technical Office.

BRASS IMMERSION PROBE WITH CONNECTOR • Add "K" to the end of the code



NOTE: well not included

EXTERAL TEMPERATURE PROBE • Cod. RFSONDAE



TECHNICAL FEATURES	
Case material	plastic
Thermal well material	stainless steel
Operating environmental conditions	-40°C ÷ 100°C, relative humidity: 0 ÷ 100%
Sensor	NTC 10kΩ
Minimum insulation resistance	100Ω to 100Vdc
Degree of protection	IP65 / IP67 according to IEC60529



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BODY VALVE ASSIGNMENT

Diamant CLIMA actuators with Comparato connection can be coupled to body valve shown in "Diamant PRO" data sheet, brass ball body valve -DP1.0-20" and on listed body valve with spacer for insulation or spacer for insulation and manual override

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DN	Ø	2-way BRASS	3-way BRASS "T"- port "L"- port	3-way BRASS Mixing Diverting	2-way INOX	3-way INOX	2-way PVC	3-way PVC	2-way FLANGED BALL VALVE cast iron	BUTTERFLY
-	1/4"	DIAMANT CLIMA	DIAMANT CLIMA	-	-	DIAMANT CLIMA	-	-	-	-
10	3/8"	DIAMANT CLIMA	DIAMANT CLIMA	-	-	DIAMANT CLIMA	DIAMANT CLIMA	AVAILABLE ON DIAMANT CLIMA WITH COMPARATO CONNECTION	-	-
15	1/2"	DIAMANT CLIMA	DIAMANT CLIMA	DIAMANT CLIMA	DIAMANT PRO	DIAMANT CLIMA COMPACT CLIMA	DIAMANT CLIMA		-	-
20	3/4"	DIAMANT CLIMA	DIAMANT CLIMA COMPACT CLIMA	DIAMANT CLIMA	DIAMANT PRO	COMPACT CLIMA	DIAMANT CLIMA		-	-
25	1"	DIAMANT CLIMA	COMPACT CLIMA	DIAMANT CLIMA COMPACT CLIMA	DIAMANT CLIMA COMPACT CLIMA	COMPACT CLIMA	DIAMANT CLIMA		COMPACT CLIMA	-
32	1"1/4	DIAMANT CLIMA COMPACT CLIMA	COMPACT CLIMA	COMPACT CLIMA	COMPACT CLIMA	-	DIAMANT CLIMA		COMPACT CLIMA	COMPACT CLIMA
40	1"1/2	COMPACT CLIMA	-	COMPACT CLIMA	COMPACT CLIMA	-	DIAMANT CLIMA COMPACT CLIMA	COMPACT CLIMA	-	COMPACT CLIMA
50	2"	COMPACT CLIMA	-	-	-	-	COMPACT CLIMA	COMPACT CLIMA	-	COMPACT CLIMA

Other combinations on request

EXAMPLE OF SPECIFICATIONS

DIAMANT CLIMA ACTUATOR with temperature probe and integrated electronic thermostat, ON/OFF control according to the measured temperature, temperature range: -15°C ÷ +85°C, Operational room temperature: -10°C ÷ +50°C, Power supply: 230V AC50/60 Hz, operating time: 35 sec / 90°, degree of protection: IP67, connection to ball valve: Comparato connection.

Brand: **COMPARATO**

Code: **CLIMA230D**

UPDATED DATA SHEETS AVAILABLE AT www.comparato.com

In order to provide an up-to-date service, Comparato Nello S.r.l. reserves the right to modify technical data, drawings, graphs and photos of this data sheet at any time, without prior notice.

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