

## RADIANT SYSTEMS Regulation and distribution

eurotherm.info

More quality for the indoor **climate**. More value for **well-being**.



### Lifetime Warranty

Eurotherm radiant systems are lifelong guaranteed by ITAS Assicurazioni. Eurotherm extends the guarantee to the entire lifetime of the radiant system against unintentional damage caused to third parties resulting from manufacturing, assembly and/or design defects.

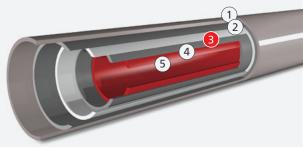
## MidiX Plus pipe

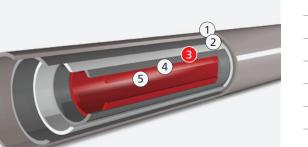
- 5-layer pipe with oxygen barrier.
- Oxygen barrier 10 times higher than standard specification EN 1264-4:2021.
- High flexibility and maximum durability thanks to state-of-the-art production lines.
- Innovative twist-free unrolling system from the inside.
- Indication of installed and remaining length on the hose.

The MidiX Plus PE-RT Type II pipe (ISO 22391, ISO 24033, ISO 21003, EN 1264, BRL 5602, BRL 5607, DIN 4726, ISO EN 11855) is a high-temperature resistant polyethylene pipe with an EVOH oxygen barrier. It features low vapour permeability (0.32 mg/(m<sup>2</sup>d) at 40 °C and 3.6 mg/(m<sup>2</sup>d) at 80 °C, tested per ISO 17455). The pipe meets mechanical strength standards for classes 4 and 5 at 6 bar (ISO 10508), ensuring a 50-year lifespan.

It can be laid cold and is supplied in rolls of suitable lengths, stored away from sunlight. The pipe is marked with its mechanical properties and remaining roll length. Quality is verified through third-party inspections by KIWA N.V., with KOMO K 86478, DIN CERTCO 3 V399 PE-RT system certification, and CE marking (ETA 17-1013). An externally verified EPD based on EN ISO 14025 confirms the product's life cycle assessment.

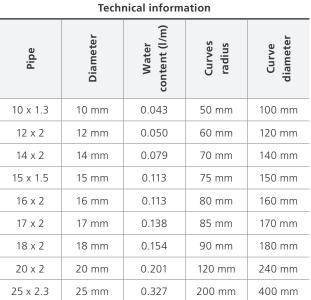
- 1. High-temperature resistant polyethylene
- 2. Adhesive
- 3. Oxygen barrier
- 4. Adhesive
- 5. High-temperature resistant polyethylene





	Field of application				
	Underfloor heating panels	High temperature radiators			
Class	4	5			
T max	70 °C	90 °C			
Pressure	6 bar	6 bar			

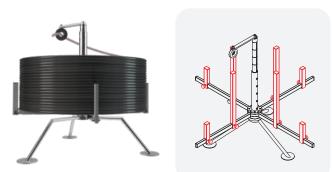
1) Detailed information on request



## Innovative **pipe decoiler**

- Lightweight aluminium body.
- Mounting without screws or tools.
- Double ball bearings.
- Unrolling from inside and outside.
- Compact and transportable.

New pipe decoiler designed to optimise the laying of MidiX Plus pipes. The ability to unwind from the inside ensures quick and easy laying without twisting.





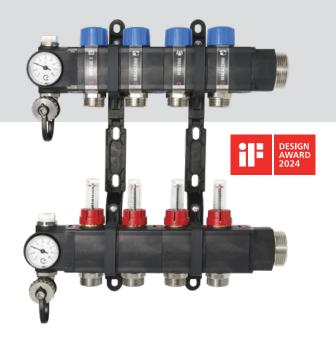
COLUMN CO	

EPD

## SL 1" manifold

- Safe and fast Screw & Lock assembly system.
- Integrated thermal insulation chambers and valve PE insulation (optional).
- Double O-ring connection for maximum tightness.
- Version with Automatic Flow Control (AFC).

Modular pre-assembled SL flow/return manifold, easy to assemble thanks to the innovative Screw & Lock system, made of reinforced polyamide, with integrated thermal insulation chambers, ideal for heating and cooling, complete with: micrometric flow controller for each circuit, flow meter for each circuit, terminal with fill/drain tap, air bleed valves, flow thermometer, return thermometer and clip-on local identification plates. Brackets for fixing the manifold to the wall or inside the cabinet. Possibility of reversibility on site for right or left connections, top or bottom and also single circuit. Prepared for the installation of actuators on each circuit. 1"¼ M GAS connections with flat



head designed for flat gasket connection (manifold connection with flat gasket). Installation depth 90 mm or 80 mm with steel bracket kit for cabinet 80.



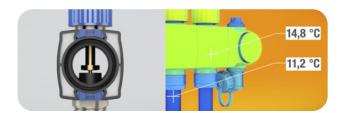
#### Screw and lock: simple and safe

The innovative Screw & Lock system allows you to quickly and safely assemble the SL manifold in just a few steps, without using special tools. In fact, each individual module has a double O-ring for fastening which guarantees a perfect seal. After tightening, it will be possible to firmly lock all the individual parts of the manifold body by simply pressing the clips located on the base and upper side of the modules. The Screw & Lock system allows you to easily reverse the couplings or reverse one or more modules on-site.



Labels

The SL manifold is equipped with room labelling clips, which can also be customized.



#### Always insulated manifold

The SL manifold incorporates an air chamber that thermally insulates each module. This avoids unnecessary heat loss caused by low winter temperatures and condensation problems in the summer when the radiant system is in cooling mode. Thanks to a specially designed PE shell, the insulation extends beyond the manifold body to the ball valves.

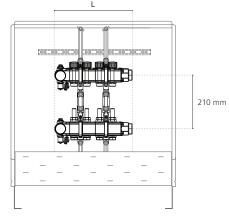
## Innovative **AFC** technology

AFC is the innovative valve insert for automatic flow control. Once the desired value has been set, the valve ensures that it is not exceeded. It is possible to use this technology even in complex systems or in existing buildings where the system dimensional data are often not available and the use of traditional valves may prove inefficient.



The SL manifold is the only one of its kind to be pre-configured for the installation of the AFC unit.

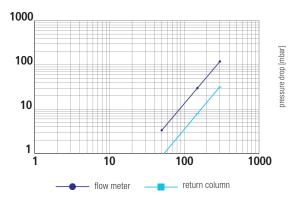
Fluid used	water, glycol water (max 30%)
Max operating pressure	6 bar
Max test pressure	6 bar
Operating temperature	10-60° C
Flow meter scale (±10%)	1-5 l/min
Main manifold connection	ø 1″¼ M
Maximum capacity	1700 l/h



#### **Compatible with AFC technology** The SL manifold is prepared for mounting the AFC device

(optional), the innovative valve insert for automatic flow regulation.

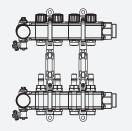




#### SL 1" manifold complete

article	circuits	L [mm]	weight [kg]	clearance between cab. and manif. + valves	cabinet 110   80
4120060101	SET 01+01	50			
4120000101	SET 01+01	50			
4120010101	01+01	153	1.4	302	mod. 1
4120010102	02+02	203	1.8	252	mod. 1
4120010103	03+03	253	2.1	202	mod. 1
4120010104	04+04	303	2.5	152	mod. 1
4120010105	05+05	353	2.9	102	mod. 1
4120010106	06+06	403	3.2	302	mod. 2
4120010107	07+07	453	3.6	252	mod. 2
4120010108	08+08	503	4.0	202	mod. 2
4120010109	09+09	553	4.4	152	mod. 2
4120010110	10+10	603	4.7	102	mod. 2
4120010111	11+11	653	5.2	202	mod. 3
4120010112	12+12	703	5.6	152	mod. 3
4120010113	13+13	753	6.0	102	mod. 3
4120010114	14+14	803	6.4	252	mod. 4

article	description
4930020401	set of SL steel brackets for cabinet 80
4710020306	pair of SL ball valves square/straight 1"1/4 F – 1" F – L 145 mm (with flat seat gasket)
4710020307	pair of SL straight ball valves 1"14 – F-F no butterfly – L 60 mm (with flat-seated gasket)
4713010301	pair of PE shells for insulating SL valves

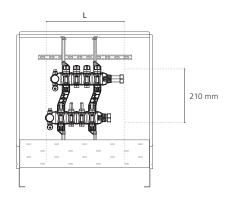


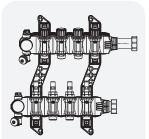
## Elite Black-Line 1"1/4 manifold

- Micrometric flow for each circuit.
- Separate modular components.
- Reinforced polyamide construction.
- Easy attachment of pipes to the manifold.

Pre-assembled modular supply/return manifold made of reinforced polyamide and complete with: micrometric flow regulator for each circuit, flow meter for each circuit, terminal including fill/ drain tap, vent valves, flow thermometer, return thermometer. Brackets for unassembling the manifold fixing on wall or in cabinet. Variable length depending on connections. Variable weight depending on connections. Prepared for mounting actuators on each circuit. 1"¼ GAS union connections with gasket.







#### Elite Black-Line Manifold 1"1/4

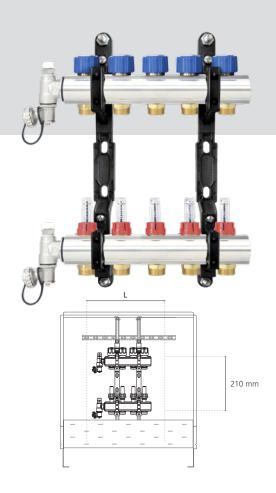
article	circuits	L [mm]	weight [kg]	clearance between cab. and manif. + valves	cabinet 110   80
4110060101	<b>SET</b> 01+01	56			
4110010101	01+01	241	2.5	295	mod. 1
4110010102	02+02	297	2.8	239	mod. 1
4110010103	03+03	353	3.3	183	mod. 1
4110010104	04+04	409	3.7	127	mod. 1
4110010105	05+05	465	4.2	321	mod. 2
4110010106	06+06	521	4.7	265	mod. 2
4110010107	07+07	577	5.2	209	mod. 2
4110010108	08+08	633	5.7	153	mod. 2
4110010109	09+09	689	6.2	247	mod. 3
4110010110	10+10	745	6.6	191	mod. 3
4110010111	11+11	801	7.3	135	mod. 3
4110010112	12+12	857	7.7	279	mod. 4
4110010113	13+13	913	8.2	223	mod. 4
4110010114	14+14	969	8.8	167	mod. 4
4110010115	15+15	1025	9.1	111	mod. 4
4110010116	16+16	1081	9.6	355	mod. 5

article	description
4930020101	set of Elite Black-Line steel brackets cabinet 80

## SF 1" manifold

- Micrometric flow for each circuit.
- Nickel-plated brass construction.
- Compact dimensions.
- Operating pressure 10 bar.
- Operating temperature 10-60° C

1" nickel-plated brass bar forward/return manifold complete with: shut-off valves and balancing valve for each circuit, loading valve, unloading valve, flow meters, vent valves, brackets for fixing manifold to wall or in cabinet. Prepared for mounting actuators on each circuit. Variable length depending on connections. Variable weight depending on connections. 1" GAS female pipe connections.



<u>a mga mga</u>	

#### SF manifold 1"

article	circuits	L [mm]	weight [kg]	clearance between cab. and manif. + valves	cabinet 110   80
4220010202	02+02	146	2.1	384	mod. 1
4220010203	03+03	196	2.9	334	mod. 1
4220010204	04+04	246	3.6	284	mod. 1
4220010205	05+05	296	4.3	234	mod. 1
4220010206	06+06	346	5.0	184	mod. 1
4220010207	07+07	396	5.6	134	mod. 1
4220010208	08+08	446	6.4	334	mod. 2
4220010209	09+09	496	7.0	284	mod. 2
4220010210	10+10	546	7.7	234	mod. 2
4220010211	11+11	596	8.3	184	mod. 2
4220010212	12+12	646	9.0	134	mod. 2
4220010213	13+13	696	9.6	234	mod. 3
4220010214	14+14	746	10.4	184	mod. 3

article	description
4710020301	pair of 1" straight ball valves complete with thermometers L 70 mm
4710020101	pair of angle ball valves M-F 1" – $\frac{3}{4}$ " with pipe unions and extensions – L 165 mm

## Industrial 1"1/2 | 2" manifold

- Stainless steel construction.
- Complete with 2 shut-off valves for each circuit.

Industrial manifold made of AISI 304 stainless steel, with 2 shutoff ball valves for each circuit made of nickel-plated brass (CW 617N – UNI EN 12165/98), vent/load tap made of nickel-plated brass (CW 617N – UNI EN 12165/98), fixing brackets made of galvanized steel.

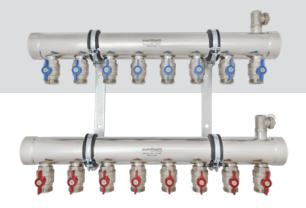
article	description
4810252303	adapter for 25 x 2.3 mm pipe
4810202303	adapter for 20 x 2 mm pipe industrial manifold

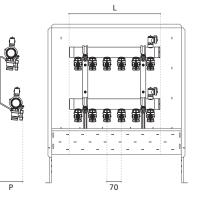
#### Industrial manifold 1"<sup>1</sup>/<sub>2</sub>

article	circuits	L [mm]	P [mm]	clearance between cabinet and manifold	outdoor cabinet
4310010303	03+03	221	125	439	mod. 1
4310010304	04+04	291	125	369	mod. 1
4310010305	05+05	361	125	549	mod. 2
4310010306	06+06	431	125	479	mod. 2
4310010307	07+07	501	125	409	mod. 2
4310010308	08+08	571	125	489	mod. 3
4310010309	09+09	641	125	419	mod. 3
4310010310	10+10	711	125	349	mod. 3

#### Industrial manifold 2"

article	circuits	L [mm]	P [mm]	clearance between cabinet and manifold	outdoor cabinet
4310020311	11+11	789	135	471	mod. 4
4310020312	12+12	859	135	401	mod. 4
4310020313	13+13	929	135	331	mod. 4
4310020314	14+14	999	135	561	mod. 5
4310020315	15+15	1069	135	491	mod. 5
4310020316	16+16	1139	135	421	mod. 5
4310020317	17+17	1209	135	351	mod. 5
4310020318	18+18	1279	135	581	mod 6



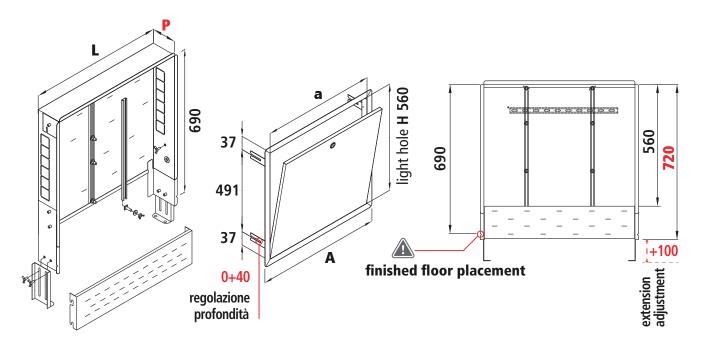


## Wall-mounted cabinet 80

- Cabinet depth 80 mm.
- Quick and easy installation.

Eurotherm wall-mounted electrogalvanised sheet metal collector cabinet adjustable in height, complete with electrogalvanised sheet metal door with locking block. RAL 9003 colour finish. Version for installations with depth 80 mm.





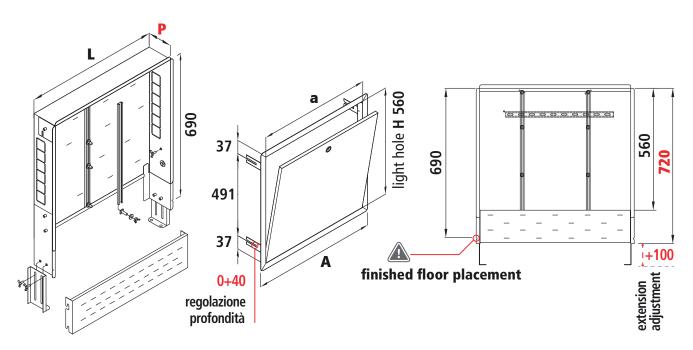
article	model	L [mm]	A [mm]	a [mm]	P [mm]
4610100201	mod. 1	600	660	595	80
4610100202	mod. 2	850	910	845	80
4610100203	mod. 3	1000	1060	995	80
4610100204	mod. 4	1200	1260	1195	80
4610100205	mod. 5	1500	1560	1495	80
4610100206	mod 6	1800	1860	1795	80

## Wall-mounted cabinet 110

- Cabinet depth 110 mm.
- Quick and easy installation.

Eurotherm wall-mounted electrogalvanised sheet metal collector cabinet adjustable in height, complete with electrogalvanised sheet metal door with locking block. RAL 9003 colour finish. Version for installations with a depth of 110 mm.





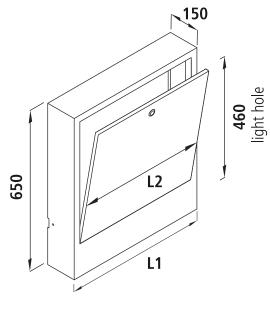
article	model	L [mm]	A [mm]	a [mm]	P [mm]
4610100101	mod. 1	600	660	595	110
4610100102	mod. 2	850	910	845	110
4610100103	mod. 3	1000	1060	995	110
4610100104	mod. 4	1200	1260	1195	110
4610100105	mod. 5	1500	1560	1495	110
4610100106	mod 6	1800	1860	1795	110

## Cabinet for **outdoor**

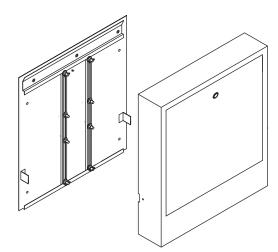
- Cabinet depth 150 mm.
- Quick and easy installation.
- Ideal for industrial buildings.

Outdoor manifold holder cabinet (patent pending) adjustable in height, variable length depending on the size of the manifold, painted frame, adjustable feet, movable brackets for securing the manifold, painted door with key lock, not compatible for cabinet regulation installations.





Note: The cabinet consists of 2 elements



article	model	L1 [mm]	L2 [mm]	cabinet
4610100401	mod. 1	660	595	mod. 4
4610100402	mod. 2	910	845	mod. 4
4610100403	mod. 3	1060	995	mod. 5
4610100404	mod. 4	1260	1195	mod. 5
4610100405	mod. 5**	1560	1495	mod. 5
4610100406	mod. 6**	1860	1795	mod. 5

*i* \*\* for Art. 4610100405 and 4610100406 the cabinet closure points are 2





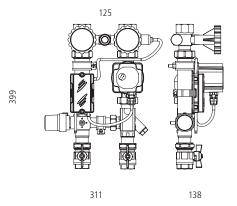
## Vertical fixed point regulation

- Compact adjustment.
- Preassembled components.
- Ease of installation.
- Reduced consumption.

Due to its compact size, the vertical fixed point regulation can be installed even in small heating plants. In addition, thanks to the high-efficiency variable-speed circulator, it ensures a constant flow rate and significant energy savings. The temperature regulation system consists of the following pre-assembled elements: electronic variable-speed circulating pump, safety thermostat, flow and return temperature thermometers, thermostatic valve, electronic retarder, bypass with pressure relief valve, four ball valves and flow regulators. Energy saving EEI  $\leq$  0.20. Kv A-C 1.3, max flow rate 1300 l/h.



article	description
5210020106	fixed point vertical variable pump





## New Compamat regulation

- High-efficiency circulator.
- High-linearity mixer to optimise comfort.
- Thermal insulation shell included.
- Very compact dimensions.
- Possibility of horizontal or vertical installation.

Regulation for managing the low-temperature radiant system in heating and cooling with anti-condensation insulation shell made of expanded polystyrene. The variable-speed pump is a circulator with an inverter-controlled permanent-magnet synchronous motor with a supply voltage of 230 V AC at a frequency of 50 Hz and a min. consumption of 3 W and max. 225 W. The servomotor can receive three-point control, has a stroke time (open/close) of 120 sec, has a supply voltage of 230 V AC at a frequency of 50 Hz and a consumption of 8 W. The mixing valve has a rotating spherical element to optimise mixing accuracy. Suitable for installation in central heating plant and can be installed horizontally and vertically. Recommended in combination with the Eurotherm SmartComfort 365 climate regulation system. The regulation consists of: electronic retarder, flow probe well, variable speed pump, servomotor, 3-way mixing valve, full-pass valve with thermometer for flow temperature, full-pass valve with thermometer for return temperature, complete with fullpass shut-off valves. Kv of the whole regulation = 8.5. Indicative maximum flow rates are 2000 l/h (R), 4000 l/h (TOP), 6000 l/h (SUPER).

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First start-up on all Eurotherm SpA SB temperature controllers not included. Contact authorised service centres.

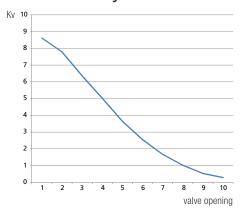
#### Radiant system side connections 1" F

Generator side pipe union connections 1"1/4 F



Compatible with regulation system **SmartComfort 365** 

#### Valve linearity

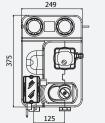


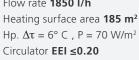
- 1. return thermometer with ball valve
- 2. delivery thermometer with ball valve
- 3. safety thermostat with delay
- 4. delivery probe sump
- 5. electronic circulator pump
- 6. polypropylene cover
- 7. three-way mixer valve
- 8. couplings ø 1"¼ with seal

#### **New Compamat R**

#### 5330010101

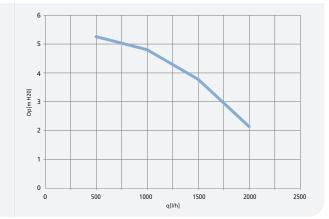






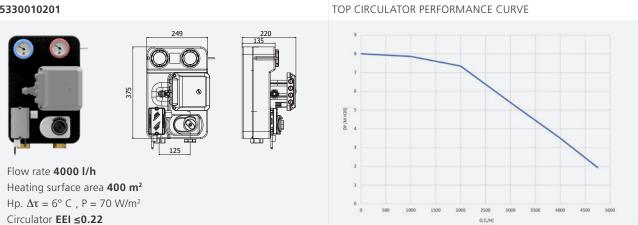
Flow rate 1850 l/h

#### CIRCULATOR PERFORMANCE CURVE R



#### **New compamat TOP**

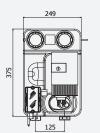
#### 5330010201



#### **New Compamat SUPER**

#### 5330010301

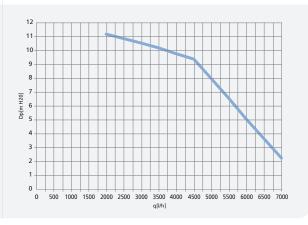




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Flow rate 6000 l/h Heating surface area  $600\ m^2$ Hp.  $\Delta \tau$  = 6° C , P = 70 W/m² Circulator **EEI ≤0.23** 

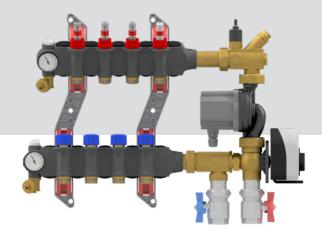
SUPER CIRCULATOR PERFORMANCE CURVE

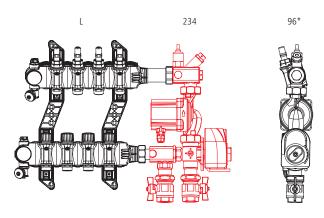


## Command Mix Elite Black-Line

- 3-way mixing valve.
- Version with variable speed pump EEI  $\leq 0.20$ .

Control for low temperature radiant system management in heating and cooling. The variable speed pump is a circulator with an energy efficiency index of EEI  $\leq$  0.20 with a permanent magnet synchronous motor with a supply voltage of 230 V AC at a frequency of 50 Hz and a min. consumption of 3 W and max. 42 W. The servomotor can receive three-point control, has a stroke time (open/close) of 120 sec, has a supply voltage of 230 V AC at a frequency of 50 Hz and a consumption of 8 W. Kv B-C: 3, Kv A-C: 4.5, max flow rate: 1500 l/h. The mixing valve has a rotating spherical element to optimise mixing accuracy. Suitable for connection systems with Elite Black-Line manifolds, with variable length depending on connections. Compatible with the Eurotherm SmartComfort 365 regulation system. Regulation consists of: variable-speed pump, 3-way mixing valve with servomotor, safety thermostat with electronic delay, flow sensor well, primary flow and return valves, and pump-collector connections.

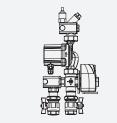




\* with actuators

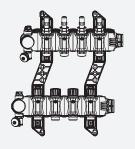






#### Command Mix Elite Black-Line 3-way mixing valve

**5220020301** *(i)* • variable speed pump EEI ≤ 0.20 • valves included



#### Elite Black-Line manifold for Command Mix

article	circuits	L [mm]
4110010202	02+02	297
4110010203	03+03	353
4110010204	04+04	409
4110010205	05+05	465
4110010206	06+06	521
4110010207	07+07	577
4110010208	08+08	633
4110010209	09+09	689
4110010210	10+10	745
4110010211	11+11	801
4110010212	12+12	857

#### Command Mix + Elite Black-Line manifold assembly

no. of circuits	length Command Mix [mm]	length internal cabinet [mm]	clearance between cabinet and Command Mix [mm]	model cabinet 110
2	531	850	319	mod. 2
3	587	850	263	mod. 2
4	643	850	207	mod. 2
5	699	850	151	mod. 2
6	755	1000	245	mod. 3
7	811	1000	189	mod. 3
8	867	1000	133	mod. 3
9	923	1200	277	mod. 4
10	979	1200	221	mod. 4
11	1035	1200	165	mod. 4
12	1091	1200	109	mod. 4



 for any requests for variants of the indicated items (e.g., manifolds with connections on the left), the timing is at least 5 working days from the order
recommended assembly of the

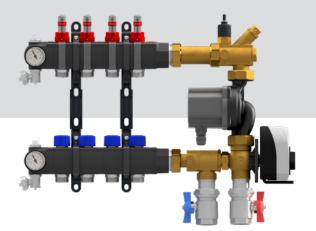
kit to the manifold. As standard, the adjustments in the cabinet are mounted with right (dx) supply. It is possible to specify the left (sx) fed position in the order

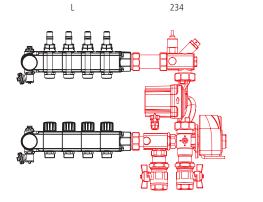
First start-up on all Eurotherm SpA SB temperature controllers not included. Contact authorised service centres.

## Command Mix SL

- 3-way mixing valve.
- Optimal management of radiant temperatures.
- Microregulation of flow and flow rates.
- PE shell for insulation of the Command part.

Control for low temperature radiant system management in heating and cooling. The variable speed pump is a circulator with an energy efficiency index of  $EEI \leq 0.20$  with a permanent magnet synchronous motor with a supply voltage of 230 V AC at a frequency of 50 Hz and a min. consumption of 3 W and max. 42 W. The servomotor can receive three-point control, has a stroke time (open/close) of 120 sec, has a supply voltage of 230 V AC at a frequency of 50 Hz and a consumption of 8 W. Kv B-C: 3, Kv A-C: 4.5, max flow rate: 1500 l/h. The mixing valve has a rotating spherical element to optimise mixing accuracy. Suitable for connection systems with SL manifolds, with variable length depending on connections. Compatible with the Eurotherm SmartComfort 365 regulation system. Regulation consists of: variable-speed pump, 3-way mixing valve with servomotor, safety thermostat with electronic delay, flow sensor well, primary flow and return valves, and pump-collector connections.







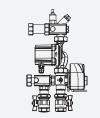
89

#### Compatible with SmartComfort 365 regulation system





PE insulation shell not included
actuators not included



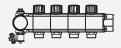
#### **Command Mix SL** 3-way mixing valve

5220020201

variable speed pump EEI ≤ 0.20
valves included

#### Complete SL manifold for Command Mix SL





article	circuits	L [mm]
4120010202	02+02	203
4120010203	03+03	253
4120010204	04+04	303
4120010205	05+05	353
4120010206	06+06	403
4120010207	07+07	453
4120010208	08+08	503
4120010209	09+09	553
4120010210	10+10	603
4120010211	11+11	653
4120010212	12+12	703
4120010213	13+13	753

#### Command Mix + manifold assembly SL

no. of circuits	length Command Mix SL [mm]	length internal cabinet [mm]	clearance between cabinet and Command Mix SL [mm]	model cabinet 110
2	437	600	163	mod. 1
3	487	600	113	mod. 1
4	537	850	313	mod. 2
5	587	850	263	mod. 2
6	637	850	213	mod. 2
7	687	850	163	mod. 2
8	737	850	113	mod. 2
9	787	1000	213	mod. 3
10	837	1000	163	mod. 3
11	887	1000	113	mod. 3
12	937	1200	263	mod. 4
13	987	1200	213	mod. 4



for any requests for variants of the indicated items (e.g., manifolds with connections on the left), the timing is at least 5 working days from the order

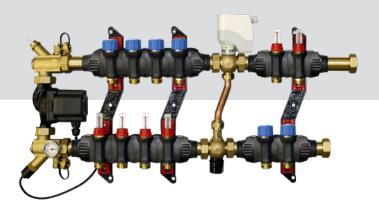
recommended assembly of the kit to the manifold. As standard, the adjustments in the cabinet are mounted with right (dx) supply. It is possible to specify the left (sx) fed position in the order

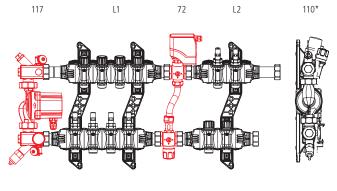
First start-up on all Eurotherm SpA SB temperature controllers not included. Contact authorised service centres.

### Command Duo Elite Black-Line

- 3-way diverter valve with bypass.
- Version with variable speed pump EEI  $\leq$  0.20.

Control for low and high temperature radiant system management in heating and cooling. The variable speed pump is a circulator with an energy efficiency index of EEI  $\leq$  0.20 with a permanent magnet synchronous motor with a supply voltage of 230 V AC at a frequency of 50 Hz and a min. consumption of 3 W and max. 42 W. The servomotor can receive three-point control, has a stroke time (open/close) of 150 sec, has a power supply of 230 V AC at a frequency of 50 Hz and a consumption of 8 W. The 3-way diverter valve with bypass for adjusting the amount of return flow of the primary circuit. Suitable for connection with Elite Black-Line basic manifolds with variable length depending on connections. Prepared to be connected to a second low temperature radiant system manifold having 1" female connections. Recommended in combination with the Eurotherm SmartComfort 365 climate regulation system. The control consists of: electronic retarder, flow probe well, variable speed pump, servomotor, 3-way diverter valve, load valve, drain valve, flow temperature thermometer. Flow and return valves to the primary are available as options.





\* with actuators



**Command Duo** 

5210020105 summer/winter | without electronics | Kv 1.7

- *i* variable speed pump EEI ≤ 0.20
  - manifolds, brackets and SmartComfort 365 not included

#### Fixed point

5210020103

fixed point | max flow rate 1300 l/h | Kv 1.3

manifolds, brackets not included

#### Compatible with SmartComfort 365 regulation system







adapters not included, see p. 26



 for any requests for variants of the indicated items (e.g., manifolds with connections on the left), the timing is at least 5 working days from the order
in case of using regulation

only with low temperature, the width of regulation is reduced by 160 mm (about 3 connections). Recommended installation of the kit at the manifold.

As standard, the adjustments in the cabinet are mounted with right (dx) supply. It is possible to specify the left (sx) fed position in the order

Low temperature 1"1/4

article	circuits	L1 [mm]
4110020101	01+01	246
4110020102	02+02	302
4110020103	03+03	358
4110020104	04+04	414
4110020105	05+05	470
4110020106	06+06	526
4110020107	07+07	582
4110020108	08+08	638
4110020109	09+09	694
4110020110	10+10	750
4110020111	11+11	806
4110020112	12+12	862
4110020113	13+13	918

#### High temperature 1"1/4

article	circuits	L2 [mm]
4110030101	01+01	207
4110030102	02+02	263
4110030103	03+03	319
4110030104	04+04	375
4110030105	05+05	431

eccessories and Elite Black-Line ball valve pair (4710020303), ball valve spacer set (4910010113) see p. 26

#### **Command Duo Elite Black-Line in cabinet**

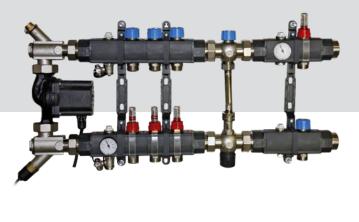
no. circuits	no. circuits	length Command Duo	length internal	clearance between cabinet and Command	model cabinet
BT	AT	Elite B-L [mm]	cabinet [mm]	Duo Elite B-L [mm]	110
1	1	642	850	144	mod. 2
2	1	698	1000	238	mod. 3
3	2	810	1000	126	mod. 3
4	2	866	1200	270	mod. 4
5	2	922	1200	214	mod. 4
6	2	978	1200	158	mod. 4
7	2	1034	1200	102	mod. 4
8	2	1090	1500	346	mod. 5
9	2	1146	1500	290	mod. 5
10	2	1202	1500	234	mod. 5
11	2	1258	1500	178	mod. 5
12	2	1314	1500	122	mod. 5
13	2	1370	1800	366	mod 6

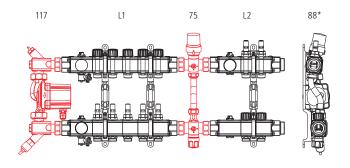
First start-up on all Eurotherm SpA SB temperature controllers not included. Contact authorised service centres.

## Command Duo SL

- 3-way diverter valve with bypass.
- Version with variable speed pump EEI  $\leq 0.20$ .

Control for low and high temperature radiant system management in heating and cooling. The variable speed pump is a circulator with a permanent magnet synchronous motor and has an EEI (ENERGY EFFICIENCY INDEX) value ≤ 0.20. The servomotor can receive three-point control, has a stroke time (open/close) of 150 sec, and a power supply of 230 V AC at a frequency of 50 Hz with a consumption of 8 W. The diverter valve has 3-way with bypass for adjusting the amount of return flow from the primary circuit. Suitable for connection with SL manifolds for high and low temperature with variable length depending on connections. Prepared to be connected to a second low temperature radiant system manifold having 1" female connections. Recommended in combination with the Eurotherm SmartComfort 365 climate regulation system. Regulation consists of: safety thermostat with electronic delayer, flow sensor well, variable speed pump, servomotor, 3-way diverter valve. Flow and return valves to the primary are available as options. Also available in fixed point version for heating-only system management (with thermostatic head instead of servomotor). Line-collector connection with flat gasket.





\* with actuators



#### **Command Duo**

5220020402

- summer/winter | without electronics | Kv 1.7
  - *i* variable speed pump  $EEI \leq 0.20$
  - manifolds, brackets and SmartComfort 365 not included



#### Fixed point

5210020401

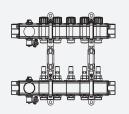
fixed point | max flow rate 1300 l/h | Kv 1.3

manifolds, brackets not included

#### Compatible with SmartComfort 365 regulation system



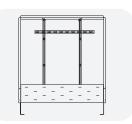
#### Low temperature



article	circuits	L1 [mm]
4120020301	01+01	211
4120020302	02+02	261
4120020303	03+03	311
4120020304	04+04	361
4120020305	05+05	411
4120020306	06+06	461
4120020307	07+07	511
4120020308	08+08	561
4120020309	09+09	611
4120020310	10+10	661
4120020311	11+11	711
4120020312	12+12	761
4120020313	13+13	811

# 

adapters not included, see p. 26



 for any requests for variants of the indicated items (e.g., manifolds with connections on the left), the timing is at least 5 working days from the order
recommended assembly of

the kit to the manifold. As standard, the adjustments in the cabinet are mounted with right (dx) supply. It is possible to specify the left (sx) fed position in the order

#### **High temperature**

article	circuits	L2 [mm]
4120030301	01+01	211
4120030302	02+02	261
4120030303	03+03	311
4120030304	04+04	361
4120030305	05+05	411

#### **Command Duo SL in cabinet**

no. cir- cuits BT	no. cir- cuits AT	length Command Duo SL [mm]	length internal cabinet [mm]	clearance between cabinet and Command Duo SL [mm]	model cabinet 110
1	1	614	850	91	mod. 2
2	1	664	1000	191	mod. 3
3	2	764	1000	91	mod. 3
4	2	814	1200	241	mod. 4
5	2	864	1200	191	mod. 4
6	2	914	1200	141	mod. 4
7	2	964	1200	91	mod. 4
8	2	1014	1500	341	mod. 5
9	2	1064	1500	291	mod. 5
10	2	1114	1500	241	mod. 5
11	2	1164	1500	191	mod. 5
12	2	1214	1500	141	mod. 5
13	2	1264	1500	91	mod. 5

First start-up on all Eurotherm SpA SB temperature controllers not included.

Contact authorised service centres.

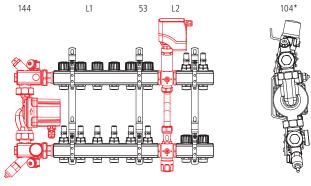
## Command Duo SF

- 3-way diverter valve with bypass.
- Version with variable speed pump EEI  $\leq 0.20$ .

Regulation system for managing low and high temperature radiant system in heating. The variable speed pump is a circulator with an energy efficiency index of EEI  $\leq$  0.20 with a permanent magnet synchronous motor with a supply voltage of 230 V AC at a frequency of 50 Hz and a min. consumption of 3 W and max. 42 W. The servomotor can receive three-point control, has a stroke time (open/close) of 150 sec, has a power supply of 230 V AC at a frequency of 50 Hz and a consumption of 8 W. A model with thermostatic valve for fixed-point control is available as an alternative to the servomotor.

The 3-way diverter valve with bypass for adjusting the amount of return flow to the primary circuit. Suitable for connection with the basic SF Series manifold with variable length depending on the connections. Prepared to be connected to a second low temperature radiant system manifold having 1" female connections. The control consists of: electronic retarder, flow probe well, variable speed pump, servo motor (or thermostatic valve), 3-way diverter valve, load valve, drain valve, manifold attachment union, flow temperature thermometer. Flow and return valves to the primary are available as options.





\* with actuators



#### **Command Duo**

**5220020109** su

- 9 summer/winter | without electronics | Kv 1.7
  - *i* variable speed pump  $EEI \le 0.20$
  - manifolds, brackets and SmartComfort 365 not included



#### Fixed point

5210020104

fixed point | max flow rate 1300 l/h | Kv 1.3

manifolds, brackets not included

#### Compatible with SmartComfort 365 regulation system



L [mm] 112

> 162 212

562

612

662

		article	circuits
		4220070202	02+02
		4220070203	03+03
		4220070204	04+04
-8		4220070205	05+05
		4220070206	06+06
		4220070207	07+07
		4220070208	08+08
		4220070209	09+09
		4220070210	10+10

4220070211

4220070212

4220070213

4910070228

#### Manifold SF base 1" with flow switch

adapters not included, see р. 26





for any requests for variants of the indicated items (e.g., manifolds with connections on the left), the timing is at least 5 working days from the order

*in case of using regulation* only with low temperature, the width of regulation is reduced by 160 mm (about 3 connections). Recommended installation of the kit at the manifold. As standard, the adjustments in the cabinet are mounted with right (dx) supply. It is possible to specify the left (sx) fed position in the order

**Command Duo SF in cabinet** 

11+11

12+12

13+13

fixing brackets

no. circuits LT	no. circuits HT	length Command Duo SF [mm]	length internal cabinet [mm]	clearance between cabinet and Command Duo SF [mm]	model cabinet 110
2	2	421	600	109	mod. 1
3	2	471	850	309	mod. 2
4	2	521	850	259	mod. 2
5	2	571	850	209	mod. 2
6	2	621	850	159	mod. 2
7	2	671	850	109	mod. 2
8	2	721	1000	209	mod. 3
9	2	771	1000	159	mod. 3
10	2	821	1000	109	mod. 3
11	2	871	1200	259	mod. 4
12	2	921	1200	209	mod. 4
13	2	971	1200	159	mod. 4

First start-up on all Eurotherm SpA SB temperature controllers not included. Contact authorised service centres.

## Accessories and distribution components

Black-Line	valves	M-F angle	valves
4710020303	pair val. black-Line ball valves square/star- board 1"¼ M – 1" F – L 64 mm	4710020305	pair of angle valves M-F 1"- 1" with spigots – L 103 mm
4910010113	set of spacers for Black-Line ball valves	4710020101	pair of angle ball valves M-F 1"- ¾" with pipe unions and extensions – L 165 mm
Straight b	all valves M-F	Straight v	alves with thermometer
4710020102	pair of straight ball valves M-F ¾"- ¾" with pipe unions – L 80 mm	4710020301	1" straight ball valve pair complete with ther- mometers – L 70 mm
ŧ		(	
SL angle/s	straight manifold valves	SL valve in	nsulation shells
4710020306	pair of SL angle/straight ball valves 1"¼ F – 1" F – L 145 mm	4713010301	pair of PE shells for insulating SL valves
0			
Straight v	alves for SL manifold	Insulation	shell for Command Mix SL
4710020307	sL straight ball valve pair 1″¼ – F-F no butterfly – L 60 mm	5920010373	insulation shell for Command Mix SL made of polyethylene
0			

MidiX pipe	e adapter
4810122001	adapter for 12 x 2 mm pipe
4810141201	adapter for 14 x 1.25 mm pipe
4810142001	adapter for 14 x 2 mm pipe
4810151501	adapter for pipe 15 x 1.5 mm
4810162001	adapter for pipe 16 x 2 mm
4810172001	adapter for pipe 17 x 2 mm
4810182001	adapter for pipe 18 x 2 mm
4810202001	adapter for pipe 20 x 2 mm
4810202303	adapter for pipe 20 x 2 mm for industrial manifold
4810252303	adapter for pipe 25/2.3 mm for industrial manifold

Bi-joint	
4810122002	bi-joint dn 12
4810142002	bi-joint dn 14
4810151502	bi-joint dn 15
4810162002	bi-joint dn 16
4810172002	bi-joint dn 17
4810182002	bi-joint dn 18
4810202002	bi-joint dn 20
4810252302	bi-joint dn 25



|--|

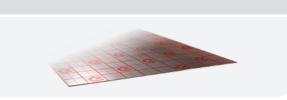
#### Guide bend

3410900220	bend guide curve . 90° 250 mm for tube up to ø 20 mm
3410900129	90° guide bend for pipe up to ø 29 mm
3410900118	90° guide bend for pipe ø 17-18 mm
3410900114	90° guide bend for pipe ø 10-15 mm

Fitting	
4810120003	fitting dn 12x1⁄2" male
4810170003	fitting dn 17x1⁄2" male
4810180003	fitting dn 18x1⁄2" male
4810200003	fitting dn 20x1/2" male
6820020125	fitting dn 25x¾" male



#### Aluminised sheet





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