Preassembled cabinet GP + KA





Function

A fixed point heating system based on the GP 1190 coupled with KA 1191 enables to manage the high and low temperature distribution in a single cabinet.

A thermostatic head placed on the thermostatic valve keeps the temperature of the water entering the radiant panels at a pre-set constant value by mixing hot water coming from the boiler with the low temperature one circulating in the panels.

The system features a bypass valve which protects the components of the system by relieving pressure in case of an excessive differential pressure. This type of system can supply a max thermal power of 14 kW with a Δt of 10 °C and a temperature of \geq 70°C on the primary circuit.

Technical data

Max. working pressure:	6 bar
Max. working temperature on primary circuit:	80 °C
Max. working temperature on secondary circuit:	70 °C
Temperature range on secondary circuit:	20°C ÷ 65
Max. differential pressure:	1 bar
Max. thermal power:	14 kW
Thermometer range:	0 ÷ 80 °C
Flow-meter display range:	0 ÷ 5 l/min
Precision of flow-meter:	± 10%
Pump max. working pressure:	6 bar
Fluid temperature:	+0 °C ÷ +95 °C
Motor:	Permanent magnet synchronous
Power supply:	230 V (+10%;-15%), 50/60 Hz
Insulation class:	F
Degree of protection:	IP X4D
Working fluids:	water in compliance with UNI 8065:2019

Materials

Manifolds

Manifold CW 617 N - DW UNI-EN 12165:2016 Screw: CW 614 N - DW UNI-EN 12164:2016 Gaskets: Peroxide cured EPDM **Flow-meters** Flow-meter Thermoresistant plastic material CW 614 N - DW UNI-EN 12164:2016 Body: Spring: Stainless steel Gaskets: Peroxide cured EPDM Pump group CW 617 N - DW UNI-EN 12165:2016 Group: CW 614 N - DW UNI-EN 12164:2016 Components: Peroxide cured EPDM Gaskets: Thermometer Case and stem: Galvanised steel Cover: Transparent plastic material Thermometric element: Bimetallic spiral spring Manual air vent valves CW 614 N - DW UNI-EN 12164:2016 Valve body: Valve body: Thermoresistant plastic material Gaskets: Peroxide cured EPDM Fill/Drain taps Terminal body: CW 617 N - DW UNI-EN 12165:2016 CW 617 N - DW UNI-EN 12165:2016 Valve body: Peroxide cured EPDM Gaskets: Pump Pump body: GJL200 EN 1561 Gaskets: EPDM Rotor assembly: Ceramic, composite material Bearing: Carbon Thermostatic head RAL9016 white ABS Head: Range of adjustment: 20 ÷ 65 °C Sensor: Liquid Sensor stroke: 0.105 mm/K Length of capillary: 2 m **Brackets** Brackets: Galvanised steel U-bolts: Galvanised steel NBR Gaskets: Surface treatment

Nickel-plating

Dimensional Drawings

CCBAP 4024

Code

17402402N

17402403N

17402404N

17402405N

17402406N

17402407N

17402408N

17402409N

17402410N

17402411N

17402412N

17402413N

17402403N

17402404N

17402405N

17402406N

17402407N

17402408N

17402409N

17402410N

17402411N

17402412N

17402413N

Code 17402402N

Low temperature fixed point distribution system + 2 high temperature connections.

Connection type W24x19

Size

G1"xW24x19

W24x19

W24x19

-

-

-

-

-

-

-

-

17402312N

17402313N

G1"xW24x19

G1"xW24x19

-

-

W24x19

W24x19

-

-

-

-

-

-

Size

CCBAP 4023

Low temperature fixed point distribution system + 3 high temperature connections. Connection type W24x19

	2										
А	В	С	D	Е	Code	Size	А	В	С	D	E
850	910	670	200	90	17402302N	G1"xW24x19	850	910	720	200	90
850	910	720	200	90	17402303N	G1"xW24x19	850	910	770	200	90
850	910	770	200	90	17402304N	G1"xW24x19	850	910	820	200	90
1000	1060	820	200	90	17402305N	G1"xW24x19	1000	1060	870	200	90
1000	1060	870	200	90	17402306N	G1"xW24x19	1000	1060	920	200	90
1000	1060	920	200	90	17402307N	G1"xW24x19	1000	1060	970	200	90
1200	1260	970	200	90	17402308N	G1"xW24x19	1200	1260	1020	200	90
1200	1260	1020	200	90	17402309N	G1"xW24x19	1200	1260	1070	200	90
1200	1260	1070	200	90	17402310N	G1"xW24x19	1200	1260	1120	200	90
1200	1260	1120	200	90	17402311N	G1"xW24x19	1200	1260	1170	200	90
1300	1360	1170	200	90	17402312N	G1"xW24x19	1300	1360	1220	200	90
1300	1360	1220	200	90	17402313N	G1"xW24x19	1300	1360	1270	200	90
F	G	Н	L	М	Code	Size	F	G	Н	L	М
-	W24x19	-	-	-	17402302N	G1"xW24x19	-	W24x19	-	-	-
-	W24x19	-	-	-	17402303N	G1"xW24x19	-	W24x19	-	-	-
-	W24x19	-	-	-	17402304N	G1"xW24x19	-	W24x19	-	-	-
-	W24x19	-	-	-	17402305N	G1"xW24x19	-	W24x19	-	-	-
-	W24x19	-	-	-	17402306N	G1"xW24x19	-	W24x19	-	-	-
-	W24x19	-	-	-	17402307N	G1"xW24x19	-	W24x19	-	-	-
-	W24x19	-	-	-	17402308N	G1"xW24x19	-	W24x19	-	-	-
-	W24x19	-	-	-	17402309N	G1"xW24x19	-	W24x19	-	-	-
-	W24x19	-	-	-	17402310N	G1"xW24x19	-	W24x19	-	-	-
-	W24x19	-	-	-	17402311N	G1"xW24x19	-	W24x19	-	-	-

CCBAP 4034

Low temperature fixed point distribution system + 2 high temperature connections.

Connection type Eurokonus

A В С D Е А С D Е Code Size Code Size В 17403402N G1"xG3/4Ek 850 910 670 200 90 17403302N G1"xG3/4Ek 850 910 720 200 90 17403403N G1"xG3/4Ek 850 910 720 200 90 17403303N G1"xG3/4Ek 850 910 770 200 90 17403404N 910 770 200 90 17403304N 850 820 200 90 G1"xG3/4Ek 850 G1"xG3/4Ek 910 17403405N 17403305N 90 G1"xG3/4Ek 1000 1060 820 200 90 G1"xG3/4Ek 1000 1060 870 200 1000 200 90 17403406N G1"xG3/4Ek 1060 870 17403306N G1"xG3/4Ek 1000 1060 920 200 90 17403407N G1"xG3/4Ek 1000 1060 920 200 90 17403307N G1"xG3/4Ek 1000 1060 970 200 90 17403408N G1"xG3/4Ek 1200 1260 970 200 90 17403308N G1"xG3/4Ek 1200 1260 1020 200 90 1070 1020 17403409N G1"xG3/4Fk 1200 1260 200 90 17403309N 1200 1260 200 90 G1"xG3/4Fk 17403410N 1070 200 90 17403310N 90 G1"xG3/4Ek 1200 1260 G1"xG3/4Ek 1200 1260 1120 200 1200 1260 1120 200 90 90 17403411N G1"xG3/4Ek 17403311N G1"xG3/4Ek 1200 1260 1170 200 17403412N G1"xG3/4Ek 1300 1360 1170 200 90 17403312N G1"xG3/4Ek 1300 1360 1220 200 90 17403413N G1"xG3/4Ek 1300 1360 1220 200 90 17403313N G1"xG3/4Ek 1300 1360 1270 200 90 F F G н G Н Code Size L Μ Code Size L М 17403402N G3/4Ek G3/4Ek G1"xG3/4Ek ----17403302N G1"xG3/4Ek ----17403403N G1"xG3/4Ek -G3/4Ek ---17403303N G1"xG3/4Ek -G3/4Ek ---17403404N G1"xG3/4Ek G3/4Ek 17403304N G1"xG3/4Ek G3/4Ek --------17403405N G1"xG3/4Ek _ G3/4Ek _ -_ 17403305N G1"xG3/4Ek G3/4Ek -_ _ _ 17403406N --_ -_ 17403306N _ _ G1"xG3/4Ek G3/4Ek G1"xG3/4Ek G3/4Ek -17403407N 17403307N G1"xG3/4Ek -G3/4Ek ---G1"xG3/4Ek -G3/4Ek _ --17403408N G1"xG3/4Fk -G3/4Fk _ --17403308N G1"xG3/4Fk _ G3/4Fk ---17403409N G1"xG3/4Ek G3/4Ek 17403309N G1"xG3/4Ek G3/4Ek _ -------17403410N G1"xG3/4Ek _ G3/4Ek _ -_ 17403310N G1"xG3/4Ek G3/4Ek --_ _ 17403311N 17403411N -G3/4Ek G3/4Ek -G1"xG3/4Ek ---G1"xG3/4Ek ---17403412N G1"xG3/4Ek G3/4Ek 17403312N G1"xG3/4Ek G3/4Ek _ ---_ ---17403413N G1"xG3/4Ek -G3/4Fk ---17403313N G1"xG3/4Ek _ G3/4Fk ---

CCBAP 4033

Low temperature fixed point distribution system + 3 high temperature connections. Connection type Eurokonus



1.	Pump group
2.	Circulation pump connection with G1"1/2 revolving nut
3.	Seats for adjustment probe of the head
4.	Manual air vent valve
5.	Pump shut-off ball valve
6.	G1" fittings with O-ring
7.	Thermometer
8.	Differential bypass valve
9.	Circulation pump with 26/60 synchronous motor and 130 mm interaxis
10.	Delivery manifold (radiant panels)
11.	Regulators and flow meters
12.	Circuit shut-off valve
13.	Return to boiler ball valve
14.	Return manifold (radiant panels)
15.	Valves for electrothermal regulation, with protection caps
16.	Thermostatic regulating valve
17.	Delivery from boiler ball valve
18.	Thermostatic head with remote sensor
19.	Spring to fix the probe
20.	Fill/Drain tap
21.	Brackets
22.	Contact safety thermostat
23.	Cabinet with adjustable ends
24.	Check valve
25.	Primary circuit delivery manifold

26. Primary circuit return manifold





Hydraulic Scheme Legend



Function

The hot water coming from the boiler and the primary circuit enters the GP 1190 pump group through the shut-off lockshield valve of the KA 1191 kit, which adjusts the maximum quantity of fluid entering the secondary circuit, thus balancing the primary one.

The water coming out of the circuit is controlled by the thermostatic regulating valve.. This valve is controlled by a thermostatic head with remote probe which keeps the temperature of the water entering the radiant panels at a pre-set constant value by mixing hot water coming from the boiler with the low temperature one circulating in the panels.

The system features a bypass valve both on the primary and the secondary circuit. In case of excessive differential pressure, the bypass valve releases the exceeding pressure, thus protecting the components and, if thermoelectric heads are employed to intercept the circuits, avoiding noise and wear on the circulation pump.

The intervention of the thermostat must block the functioning of the pump.

This type of system can supply a max thermal power of 14 kW with a Δt of 10°C and a temperature of \geq 70°C on the primary circuit.





Pump Flow Rate Diagram



Electrical Connections



Safety Thermostat

Connect the thermostat as in the scheme considering the following:

- Terminal C: phase;
- Terminal 1: opens the circuit when the temperature increases;
- Terminal 2: closes the circuit when the temperature increases.

Generally, in heating systems the electric appliance is connected to terminals C and 1 of the thermostat.

Working Instructions



How to install the fixed point thermostatic head:

- Remove the protection cap from the thermostatic head.
- To ease the installation, set the thermostatic head to the maximum value and screw it onto the valve.
- Once the installation is completed, the head must be set to the desired temperature.
- · Place the bulb of the head into the fastening device.

The theoretic flow rate of a hydraulic circuit, assigned by a technician, is given by the adjustment carried out through the regulator/flow meters assembled on the delivery manifold.

The adjustment must be carried out with the valve on the return circuit fully open. Since the flow rates of each heating ring affect each other, each single heating ring has to be adjusted until the values in litres/minute laid down in the project are satisfactorily reached.

To adjust the flow rate:







- Remove the red blocking collar.
- Close the flow-meter.
- (a1) = Do not use tools, act manually on the flow-meter.
- Open the flow-meter until it shows the desired flow rate.
- Place the blocking collar back.

How to secure the hydraulic balance against tampering:

• The regulators/flow-meters adjustment can be secured through a block cap. If needed, the caps can be sealed with iron wire and lead.

CCBAP 4024

Preaasembled fixed point thermal adjustment group with 2 connections for high temperature primary circuit and brass pump group. Connection to primary circuit through 1" full-flow ball valves. Differential bypass valve with adjustment range 0.2bar÷0.7bar for primary and secondary circuit. W24x19 secondary connections, 50 mm interaxis. Working fluids: water and glycol solutions; max. percentage of glycol 30%. Max. working pressure 6 bar. Temperature range 0÷60°C. Composed by:

- Pump group to connect the circulation pump to the manifold, complete with full-flow ball valves for the interception and replacement of the pump and balancing valve between primary and secondary circuit.
- Brass manifold with 2 primary circuit connections.
- Brass return manifold with 2 primary circuit connections and shut-off valves for electrothermal control. With protection cap and possibility to close the circuit.
- Brass delivery manifold for secondary circuit with flow rate adjustment valves and flow-meter with 0-51/min scale. Precision ±10%. Possibility to clean and replace the glass while the system is operating.
- Brass return manifold with shut-off valves for electrothermal control. With protection cap and possibility to close the circuit.
- 25-60 permanent magnet circulation pump, energy class A.
- Contact safety thermostat, range of adjustment 0°C±90°C. Degree of protection IP 20.
- Thermometer to verify the delivery temperature towards the radiant panel.
- Manual air vent valve and water fill/drain tap.
- Couple of fastening brackets with shaped bearings.
- Galvanised steel cabinet with varnished RAL 9016 white frame and case and cover. 90 mm depth.

CCBP 4023

Preaasembled fixed point thermal adjustment group with 3 connections for high temperature primary circuit and brass pump group. Connection to primary circuit through 1" full-flow ball valves. Differential bypass valve with adjustment range 0.2bar÷0.7bar for primary and secondary circuit. W24x19 secondary connections, 50 mm interaxis. Working fluids: water and glycol solutions; max. percentage of glycol 30%. Max. working pressure 6 bar. Temperature range 0÷60°C. Composed by:

- Pump group to connect the circulation pump to the manifold, complete with full-flow ball valves for the interception and replacement of the pump and balancing valve between primary and secondary circuit.
- Brass manifold with 2 primary circuit connections.
- Brass return manifold with 2 primary circuit connections and shut-off valves for electrothermal control. With protection cap and possibility to close the circuit.
- Brass delivery manifold for secondary circuit with flow rate adjustment valves and flow-meter with 0÷5l/min scale. Precision ±10%. Possibility to clean and replace the glass while the system is operating.
- Brass return manifold with shut-off valves for electrothermal control. With protection cap and possibility to close the circuit.
- 25-60 permanent magnet circulation pump, energy class A.
- Contact safety thermostat, range of adjustment 0°C±90°C. Degree of protection IP 20.
- Thermometer to verify the delivery temperature towards the radiant panel.
- Manual air vent valve and water fill/drain tap.
- Couple of fastening brackets with shaped bearings.
- Galvanised steel cabinet with varnished RAL 9016 white frame and case and cover. 90 mm depth.

CCBAP 4034

Preaasembled fixed point thermal adjustment group with 2 connections for high temperature primary circuit and brass pump group. Connection to primary circuit through 1" full-flow ball valves. Differential bypass valve with adjustment range 0.2bar÷0.7bar for primary and secondary circuit. G3/4 EK male secondary connections, 50 mm interaxis. Working fluids: water and glycol solutions; max. percentage of glycol 30%. Max. working pressure 6 bar. Temperature range 0÷60°C. Composed by:

- Pump group to connect the circulation pump to the manifold, complete with full-flow ball valves for the interception and replacement of the pump and balancing valve between primary and secondary circuit.
- Brass manifold with 2 primary circuit connections.
- Brass return manifold with 2 primary circuit connections and shut-off valves for electrothermal control. With protection cap and possibility to close the circuit.
- Brass delivery manifold for secondary circuit with flow rate adjustment valves and flow-meter with 0+5l/min scale. Precision ±10%. Possibility to clean and replace the glass while the system is operating.
- Brass return manifold with shut-off valves for electrothermal control. With protection cap and possibility to close the circuit.
- 25-60 permanent magnet circulation pump, energy class A.
- Contact safety thermostat, range of adjustment 0°C±90°C. Degree of protection IP 20.
- Thermometer to verify the delivery temperature towards the radiant panel.
- Manual air vent valve and water fill/drain tap.
- Couple of fastening brackets with shaped bearings.
- Galvanised steel cabinet with varnished RAL 9016 white frame and case and cover. 90 mm depth.

CCBP 4033

Preaasembled fixed point thermal adjustment group with 3 connections for high temperature primary circuit and brass pump group. Connection to primary circuit through 1" full-flow ball valves. Differential bypass valve with adjustment range 0.2bar÷0.7bar for primary and secondary circuit. G3/4 EK male secondary connections, 50 mm interaxis. Working fluids: water and glycol solutions; max. percentage of glycol 30%. Max. working pressure 6 bar. Temperature range 0÷60°C. Composed by: • Pump group to connect the circulation pump to the manifold, complete with full-flow ball valves for the interception and replacement of the pump and balancing valve between primary and secondary circuit.

- Brass manifold with 2 primary circuit connections.
- Brass return manifold with 2 primary circuit connections and shut-off valves for electrothermal control. With protection cap and possibility to close the circuit.
- Brass delivery manifold for secondary circuit with flow rate adjustment valves and flow-meter with 0÷5l/min scale. Precision ±10%. Possibility to clean and replace the glass while the system is operating.
- Brass return manifold with shut-off valves for electrothermal control. With protection cap and possibility to close the circuit.
- 25-60 permanent magnet circulation pump, energy class A.
- Contact safety thermostat, range of adjustment 0°C±90°C. Degree of protection IP 20.
- Thermometer to verify the delivery temperature towards the radiant panel.
- Manual air vent valve and water fill/drain tap.
- Couple of fastening brackets with shaped bearings.
- Galvanised steel cabinet with varnished RAL 9016 white frame and case and cover. 90 mm depth.



Luxor S.p.A. Sede amministrativa, stabilimento e uffici commerciali: Administrative office, factory and commercial office: Tel.: 030-9961161 – Fax: 030-9961165

via Madonnina, 94 - 25018 Montichiari - (BS) Italy

info@luxor.it – www.luxor.it Luxor si riserva il diritto di apportare miglioramenti e modifiche ai prodotti descritti ed ai relativi dati tecnici in qualsiasi momento e senza preavviso -Luxor reserves the right to ameliorate and modify the above products and their technical data at any time and without notice