



- ### LEGENDA
- Conducta din otel, agent termic tur.
 - - - - Conducta din otel, agent termic retur.
 - CZ** Cazan mural in condensatie pentru incalzire, cu functionare pe gaze naturale, schimbator de caldura monobloc din aluminiu/siliciu, echipat cu tablou de comanda cu programare functie de temperatura exteriora, echipat cu statie neutralizare condens si arzator pe gaz din inox, cu preamestec, puterea termica utila minima/maxima:16,6/107 kW la temperatura tur/retur 80/60°C.
 - B** Boiler preparare apa calda menajera.
 - P1** Pompa injectie cazan, debit : 3 mc/h, inaltime de pompare : 1,0 mCA la turatie medie, putere electrica : 150 W, alimentare monofazata.
 - P2** Pompa circulatie agent termic apa calda 80/60°C, pentru circuitul de incalzire cu ventilatoare, debit : 4,0 mc/h, inaltime de pompare : 5,4 mCA la turatie medie, putere electrica : 200 W, alimentare trifazata.
 - P3** Pompa circulatie agent termic apa calda 80/60°C, pentru circuitul de incalzire cu radiatoare, debit : 1,0 mc/h, inaltime de pompare : 1,5 mCA la turatie medie, putere electrica : 100 W, alimentare monofazata.
 - P4** Pompa circulatie agent termic apa calda 80/60°C, pentru boiler, debit : 3,5 mc/h, inaltime de pompare : 1,0 mCA la turatie medie, putere electrica : 200 W, alimentare monofazata.
 - VEI** Vas expansiune inchis cu membrana, 100 litri, 6 bar.
 - CS** Ciapeta de sens.
 - SS** Supapa de siguranta.
 - STE** Sonda de temperatura exteriora.
 - RG** Robinet de golire
 - M** Manometru

- ### LEGEND
- Steel pipe for heat carrier supply
 - - - - Steel pipe for heat carrier return
 - CZ** Condensing wall-mounted natural gas heating boiler, aluminum/silica monoblock heat exchanger provided with programming control panel depending on outdoor temperature, equipped with condense neutralizing device and stainless steel pre-mixture gas burner, minimum /maximum actual thermal efficiency :16,6/107 kW at supply/return temperature 80/60°C.
 - B** Domestic hot water boiler
 - P1** Injection pump, flow rate: 3 m³/h, delivery lift: 1,0 mCA at medium speed, electrical power: 150 W, single-phased supply.
 - P2** Hot water heat carrier circulating pump 80/60°C for heating circuit with fan coils, flow rate: 4 m³/h, delivery lift: 5,4 mCA at medium speed, electrical power: 200 W, three-phased supply.
 - P3** Hot water heat carrier circulating pump 80/60°C for heating circuit with radiators, flow rate: 1 m³/h, delivery lift: 1,5 mCA at medium speed, electrical power: 100 W, single-phased supply.
 - P4** Hot water heat carrier circulating pump 80/60°C for boiler, flow rate: 3,5 m³/h, delivery lift: 1,0 mCA at medium speed, electrical power: 200 W, single-phased supply.
 - VEI** Diaphragm expansion vessel, 100 l, 6 bars.
 - CS** Direction valve.
 - SS** Safety valve.
 - STE** Outdoor temperature sensor.
 - RG** Plug cock for discharge
 - M** Manometer.

NOTE: During the winter time, V1, V1', V4 valves would be in close position, and V2, V2', V3 valves would be in open position.
 During the summer time, V2, V2', V3 valves would be in close position, and V1, V1', V4 valves would be in open position.

D					
C					
B					
A					
Index	Date	Modificari Modification/Revision	Proiectant Designer	Aprobat Consultant Approved Consultant	Aprobat CFR Approved CFR



CLIENT / CLIENT

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EUROPEANĂ
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C.N.C.F. "C.F.R." - S.A.



CONSULTANT / CONSULTANT

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Elaborat / Elaborated	Proiectant / Designer	Valentin Radu	DEC. 2011	[Signature]

Reabilitarea liniei de cale ferata Brasov - Simeria, parte componenta a coridorului IV Pan European, pentru circulatia trenurilor cu viteza maxima de 160 km/h, Tronsoanel : Brasov - Sighisoara
 Rehabilitation of the railway line Brasov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h, Section : Brasov - Sighisoara

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Schema termomecanica centrala termica - Cladire OCC Brasov
 OCC Brasov Building - Thermomechanical schedule of central heating station

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