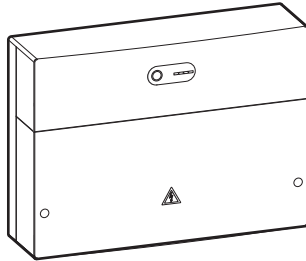
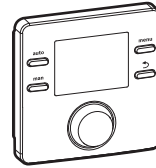




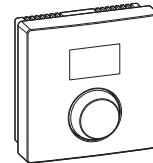
Overview



CZM100



CRC200



CRC100

Product Details

- ▶ Single or multi zone control strategy designed to compliment Bosch Greenstar Series & Buderus GB142 & GB162 Series Boilers.
- ▶ CZM100 is a three zone control module that can activate circulator pumps or zone valves in one compact module. CZM100 is expandable up to three modules providing a maximum of 8 heating zones.
- ▶ The CZM100 utilizes standard 120V 12-2 or 14-2 AWG wire for main power and circulator pump outputs. As well as a minimum of 18-2 AWG wire or for connecting CRC user interfaces. Compatible with single, multi or variable speed circulators and 2, 3 or 4 wire zone valves.
- ▶ CRC100 is an integrated temperature sensor that can be used as a boiler control or in conjunction with the CZM100 as a room controller.
- ▶ CRC200 is a programmable controller with an integrated temperature sensor that can be used as a boiler control or in conjunction with the CZM100 as a room controller.
- ▶ The NSC signal is sent via ems bus and provides more than an on / off power signal, rather it communicates a target supply temperature required to meet the demand.
- ▶ CRC100, CRC200, CZM100 are covered by a 3 year limited warranty.

Engineering specification

The installation shall consist of ___ CZM100 (Comfort Zone Manager) three zone control module capable of activating circulator pumps or zone valves. The CZM100 shall be expandable up to three modules providing a maximum of 8 heating zones. When utilized with zone valves a 24V transformer shall be field installed. The CZM100 shall have external front facing LED lights for operational visibility.

The installation shall consist of ___ CRC100 (Comfort Room Controller) to be used as a boiler control or in conjunction with the CZM100 as a room controller. CRC100 shall be used in single zone applications or in conjunction with other NSC components (CZM100 & CRC200) for multi zone installations. The CRC100 shall come equipped with an integrated temperature

sensor design to provide the boiler with a supply temperature calculated to achieve the set room temperature.

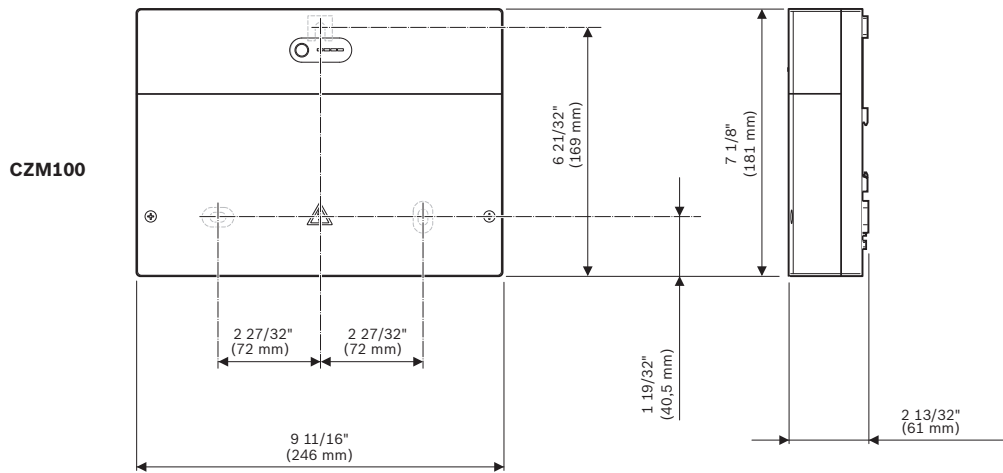
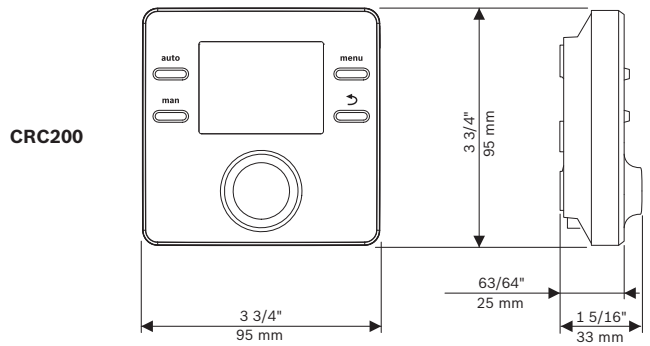
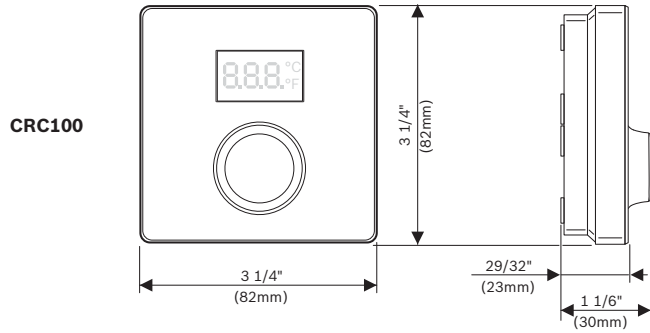
The installation shall consist of ___ CRC200 (Comfort Room Controller) to be used as a boiler control or in conjunction with the CZM100 as a room controller. CRC200 shall be a programmable room thermostat with backlight capable of displaying boiler temperature, target temperature, and outdoor temperature when optional outdoor sensor accessory is installed. CRC200 shall be used in single zone applications or in conjunction with other NSC components (CZM100 & CRC100) for multi zone installations. The CRC200 shall be capable of operating the IDHW Tank in parallel with the clock program or continuously.

NSC
 CRC100/CRC200 Comfort Room Controller
 CZM100 Comfort Zone Manager

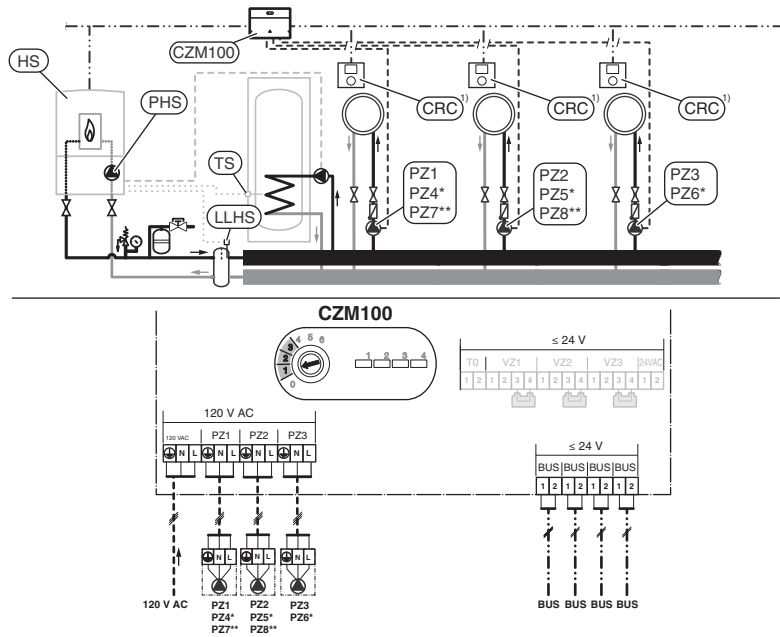


Technical Data			
Description	CZM100	CRC100	CRC200
SAP Part Number	7738110112	7738110090	7738111034
Dimensions (Height x Width x Depth)	6 21/32" x 9 11/16" x 2 13/32"	3 1/4" x 3 1/4" x 1 1/6"	3 3/4" x 3 3/4" x 1 5/6"
Power Input Line Voltage	120V 50/60Hz (12 or 14 Awg wire)	N/A	N/A
Power Input Low Voltage	24V 40VA if zone valves are used 18 or 20 Awg wire	power supplied by heat source (2 Wire EMS BUS, 10 – 24V DC)	power supplied by heat source (2 Wire EMS BUS, 10 – 24V DC)
Room Control Signal	(3) 2 Wire EMS Bus	2 Wire EMS BUS	2 Wire EMS BUS
Boiler Communication Signal	(1) 2 Wire EMS Bus	2 Wire EMS BUS	2 Wire EMS BUS
Bus Voltage	15 V DC	10 – 24V DC	10 – 24V DC
Control Range	41 – 86°F (5 - 30°C)	41 – 86°F (5 - 30°C)	41 – 86°F (5 - 30°C)
Ambient Temperature Range	32 – 140°F (0-60°C)	32 – 140°F (0-60°C)	32 – 140°F (0-60°C)
Related Current	N/A	4mA	6mA
Protection	IP20	IP20	IP20
Protection Class	I	III	III
Power Output for Circulators	(3) 120V 60Hz 2amp max per zone 5 amp max module 1/6hp	N/A	N/A
Power Output for Zone Valves	(3) 24V 1.5amp max per zone 5 amp max module	N/A	N/A
Line Voltage Fuse Protection	5amp (5mm x 20mm)	N/A	N/A
Low Voltage Fuse Protection	5amp (5mm x 20mm)	N/A	N/A
Included Supply Sensor	NTC LLH Sensor Included	N/A	N/A
Sensor Temperature Range	32– 212°F (0– 100°C)	N/A	N/A
Certification	c CSA us (for USA & Canada)	N/A	N/A
GB162 Compatible	Yes	Yes	Yes
GB142 Compatible	Yes	Yes	Yes
Greenstar Compatible	Yes	Yes	Yes
Greenstar FS Compatible	Yes	Yes	Yes
FW / FB	No	No	No
ICM, IPM, ISM	No	No	No
Compatible with 3rd party relays	N/A	No	No
Compatible with 3rd party thermostats	No	N/A	N/A

NSC Zone Module Dimensions



Heating Zones With Circulator Pumps And Low Loss Header



Heating Zones With Valve Primary / Secondary

