

# Operating Instructions and User's Information Manual

for use by heating contractor

**VIESSMANN®**

Vitocell 100-V CVA/CVAA Series  
Vitocell 100-B CVB/CVBB Series

Enameled indirect-fired domestic hot water storage tank  
42 to 120 USG (160 to 450 L) capacities



## VITOCELL® 100



Vitocell 100-V



Vitocell 100-B



*Product may not be exactly as shown*

### IMPORTANT

Read and save these instructions  
for future reference.

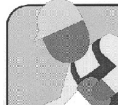
## Safety, Installation and Warranty Requirements

Please ensure that these instructions are read and understood before commencing installation. Failure to comply with the instructions listed below and details printed in this manual can cause product/property damage, severe personal injury, and/or loss of life. Ensure all requirements below are understood and fulfilled (including detailed information found in manual subsections).

### ■ Licensed professional heating contractor

The installation, adjustment, service and maintenance of this equipment must be performed by a licensed professional heating contractor.

► *Please see section entitled "Important Regulatory and Installation Requirements".*



### ■ Advice to owner

Once the installation work is complete, the heating contractor must familiarize the system operator/ultimate owner with all equipment, as well as safety precautions/requirements, shutdown procedure, and the need for professional service annually before the heating season begins.

### ■ Product documentation

Read all applicable documentation before commencing installation. Store documentation near product in a readily accessible location for reference in the future by service personnel.

► *For a listing of applicable literature, please see section entitled "Important Regulatory and Installation Requirements".*



### ■ Warranty

Information contained in this and related product documentation must be read and followed. Failure to do so renders the warranty null and void.



## Important Regulatory and Installation Requirements

### Operation

Please carefully read this manual prior to operation. The installer of the system is responsible to ensure the system operator/ultimate owner is made familiar with the system functioning, its activation, and its shut-down. The operator/ultimate owner should also complete and mail the warranty registration form in order to be eligible for limited warranty.

### Working on the equipment

The installation, adjustment, service, and maintenance of this equipment must be done by a licensed professional heating contractor who is qualified and experienced in the installation, service, and maintenance of hot water heating systems. There are no user serviceable parts on this equipment.

Ensure main power supply to equipment, the heating system, and all external controls has been deactivated. Close main oil or gas supply valve. Take precautions to avoid accidental activation of power during service work.

### Technical literature

Literature applicable to all aspects of the Vitocell:

- Technical Data Manual
- Installation Instructions
- Start-up/Service Instructions
- Operating Instructions and User's Information Manual

► Failure to abide by all the requirements set out in the technical literature renders warranty null and void.

► The completeness and functionality of field supplied electrical controls and components must be verified by the heating contractor. These include low-water cut-offs, flow switches (if used), staging controls, pumps, motorized valves, air vents, thermostats, temperature controls, etc.

► Leave all literature at the installation site and advise the system operator/ultimate owner where the literature can be found. Contact Viessmann for additional copies.

## Domestic Hot Water Production



Ensure the instructions and requirements of the boiler control and system accessories are observed.

Domestic hot water production can occur via heating boiler, a remote heating plant or low temperature heating via bivalent operation.

The maximum heating supply temperature is 230°F (110°C), the maximum operating pressure is 150 psig on the tank [100 psig where a Canadian Registration Number (CRN) is required].



### WARNING

The operating aquastat and any secondary high limit aquastat of the tank must be set such that the DHW temperature inside the tank never exceeds 203°F (95°C).



### WARNING

Domestic hot water temperatures over 125°F (52°C) can cause severe burns instantly or death from scalds. Children, disabled and elderly are at highest risk of being scalded. Feel water before bathing or showering. Temperature limiting valves are available and must be used where domestic hot water storage tank temperatures exceed 140°F (60°C).

### Domestic hot water production via a heating boiler

1. Set the desired domestic hot water temperature [140°F (60°C) for example] on the boiler control, or on the aquastat of the DHW tank (depending on the type of installation you have).
2. The boiler water supply temperature for domestic hot water production is set on the boiler control. It should be approximately 27°F (15°C) above the desired domestic hot water temperature.
3. For your personal safety, we recommend the installation of a tempering valve to restrict the entry of excessively hot domestic hot water into the system. Hire a qualified heating contractor.




Refer to the Boiler or Control Operating Instructions for more information.

## Shut-Down

If domestic hot water production is not desired and the risk of freezing temperatures in the mechanical room exists, please contact your heating contractor.

## Temperature and Pressure Relief Valve



**WARNING**

The possibility of mineral build-up on the T&P valve seat exists. Report dripping or discharges from the T&P valve to the heating contractor immediately.

- Ensure there is never any type of valve or an obstruction of any kind between the tank and the temperature and pressure relief valve (T&P valve), or between the T&P valve and the discharge line outlet.  
The discharge line must be oriented to enable unobstructed and visible flow of discharge water toward a floor drain.
- If you observe water being released out of the discharge pipe of the temperature and pressure relief valve, contact your heating contractor immediately.
- The valve test lever must be operated at least once per year by the heating contractor to ensure that waterway are clear. A licensed professional heating contractor shall reinspect the T&P valve at least once every three years. Failure to inspect can result in unsafe temperature or pressure build-up, which can result in substantial product/property damage, serious personal injury or loss of life.

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## Service and Cleaning

Inspection and (if necessary) cleaning of tank must take place within 2 years of initial start-up and as required thereafter. Reinspection time must not exceed 2 years. The internal cleaning of the domestic hot water tank including its potable water connections may only be performed by a licensed professional heating contractor. There are no user serviceable parts on this equipment. We recommend an annual (min. every two years) inspection of the built-in magnesium anode. The inspection must be performed by a heating contractor.

### IMPORTANT

**If a water softener system is used in the domestic cold water inlet piping into the tank, the water treatment system should be inspected (serviced) at the same time. If a drinking water filter is used in the main line, the filter cartridge should also be investigated. All external equipment must be serviced regularly and function properly.**

Technical information subject to change without notice.