

# 2010

## DEMK-V Serie



Diko Elektrikli Cihazlar San. ve Tic. A.Ş.

[www.diko.com.tr](http://www.diko.com.tr)

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## DEMK-V SERIE



### VILLA TYPE ELECTRIC HEATING TANKS

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## DEMK-V Series Villa TType Electric Heating Tanks

### Standard Specifications :

- Vertical
- Power range between 22,5 KW – 60 KW
- Temperature adjustment range between 0-90 °C
- Electric power and command panel
- [PLC Control panel](#)
- [Power steps control](#)
- Compact main breaker
- [Human life protection system \( Residual Current Device\)](#)
- [Safety Thermostat](#)
- [Warning system incase of over heating \(light & sound\)](#)
- [Operating voltage for command circuit 24V.AC](#)
- [Protection system against waterless operation](#)
- Warning system incase of low water level (light & sound)
- [Fan coolant system for internal panel](#)
- [Water & Dust proof panel cover with polyurethane gasket](#)
- Rock Wool Insulation
- Electrostatic powder paint coated galvanize sheet body
- Tank safety valve
- Drain valve and manometer
- Smart appearance
- 2 years product warranty
- 10 years spare parts supply warranty

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### **Optional Specifications :**

- Special production for different power requests
- Special production for different voltage requests
- Emergency stop button
- Delayed input system during power steps control
- PID proportional temperature control system
- Villa type electric heating tanks with heat ex-changer
- [Heat ex-changer circuit for hot oil, water and steam](#)
- [Vacuum safety valve](#)
- Stainless steel inner tank / outer jacket and command panel
- [Expansion tank with butyl membrane](#)
- Circulation pump
- Installation accessories
- Daily programmable time clock
- Phase protection relay
- Special solution suggestions for different process requests

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## **Standard Equipments :**

### **PLC Control Panel**

Usage purpose of this programmable logic control panel is to provide easy function follow up of the heating system. User can easily control and adjust the heating functions and follow function faults from the control panel with digital thermostat-thermometer. Data adjustment access is password locked.

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### **Power Steps Control**

Generally total power divided in to 3 equal power value as 3 groups via switches placed on panel cover. If all the switches are in "ON" position, tank will operate with maximum power. In summer season this power will not be necessary, thus it is possible to control the heating power via shutting down some of the switches.

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### **Human Life Protection System (Residual Current Device)**

Heaters leaks current as miliamper as time goes by. This leakage current relay protects system and human life against short circuits and touchings.

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### **Safety Thermostat**

Provides tank protection via breaking electric circuit of the heaters unless tank water temperature level passes over operating temperature value. Factory adjusted and sealed. This adjustment is inconvertible.

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### **Audible and Visual Warning System Against Over Heating**

Safety Thermostat will break the circuit incase the tank water temperature level will pass over the limits, thus heating will stop. In this case this warning system will warn the operator with light and voice.

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### **Reduced Voltage for Command Circuit \_ 24V.AC**

Diameter and isolation values of command cables are lower according to energy cables. This disadvantage is being eliminated via using devices with low voltage.

[▲ up](#)

### **Protection System Against Waterless Operation**

This system stops the operation to protect the heating elements incase the tank is empty or water level of the tank is low.

[▲ up](#)



### Fan Coolant System



Fan Coolant system prevents electric equipment failures due to over heating and excessive temperature via cooling the inside of the command panel. Thus longer life time and efficient operation is being ensured.

[▲ up](#)

### Water & Dust proof panel cover with polyurethane gasket

Ensures protection against water & dust with the help of its' resistance structure.

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### Optional Equipments :

#### Heat Ex-Changer Circuit with hot oil, water and steam



#### Vacuum Safety Valve

This is a mechanical safety valve which provides protection for system and installation pipes against negative pressure (inner vacuum).

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#### Expansion Tank With Butyl Membrane

This is an installation accessory which absorbes expanded water and provide system protection.

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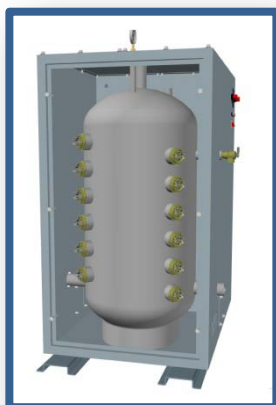
## PRODUCT DESCRIPTION



DEMK-V Serie villa type electrical heating tanks are specially designed in order to meet users special heating requests and other different process requests. This package unit is consist of both electric and mechanic part in a monoblock construction. The monoblock unit will be ready to use after performing the necessary installation input-output connections and main electric supply connections.

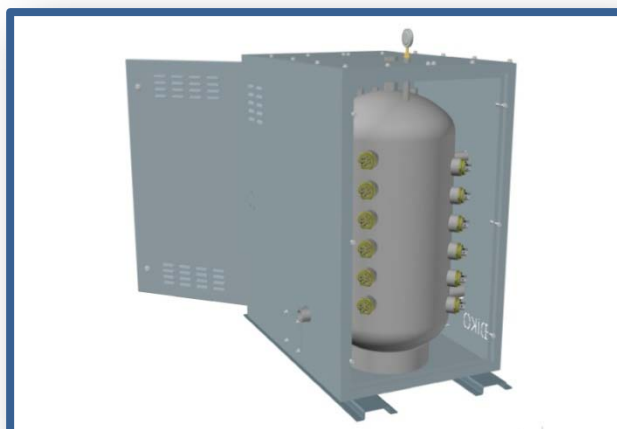
Power and command equipments of the unit are placed on its' cabinet panel. Special features including temperature adjustment thermostat, thermometer,recidual current device, power circuit on/off switch(es), on/off switch for the command circuit of the pump, audible and visual warning systems against low water level and over heating and manometer let user to operate the product efficiently. Also with the help of these equipments user can easily follow –up the functions of the system.

Power and command equipments of the unit are placed on its' cabinet panel. Special features



System automatically stops if the tank water temperature exceeds 90°C. It will automatically re-start to heat as soon as the temperature re-decrease to a normal value. System water temperature can be adjusted through the digital thermometer placed on panel door.

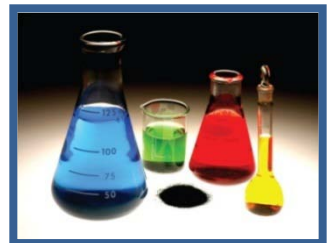
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## PLACE OF USAGE

- Villas
- Work Shops
- Apartments
- GYMs
- Milk Farms
- Oil Factories
- Chemical Industry
- Textile Industry
- Solar Energy Systems



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## DEMK-V SERIES



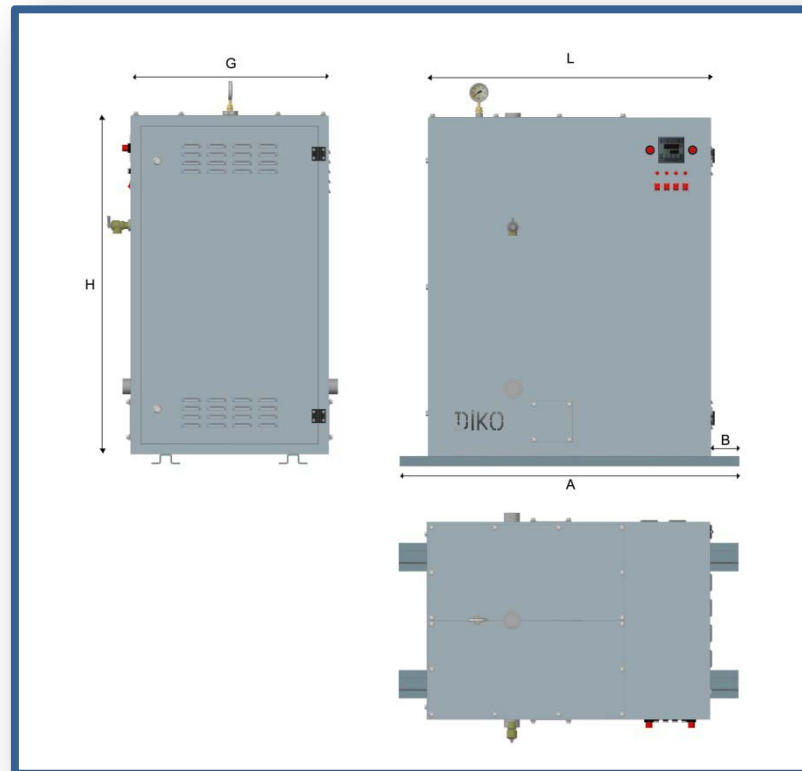
### INSTALLATION CONNECTION DIAMETERS

MODEL	POWER (KW)	Central Heating System Return	Central Heating System Output	Drain Valve	Kazan Emniyet Ventili
DEMK-22,5V	22,5	1" ¼	1" ¼	¾"	1"
DEMK-30V	30	1" ¼	1" ¼	¾"	1"
DEMK-45V	45	1" ¼	1" ¼	¾"	1"
DEMK-60V	60	1" ¼	1" ¼	¾"	1"

*Dikomarine reserves the right of changing the dimensions and models without announcing.*

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## DEMK-V SERIES VILLA TYPE ELECTRIC HEATING TANKS – DIMENSIONS





**DEMK-V SERIES**  
**VILLA TYPE ELECTRIC HEATING TANKS - DIMENSIONS**



MODEL	POWER (liter)	H Tank Height (mm)	A Foot Height (mm)	G Tank Width (mm)	L Tank Length (mm)	B Please check the schematic (mm)
DEMK-22,5V	22,5	1100	60	600	900	80,0
DEMK-30V	30	1100	60	600	900	80,0
DEMK-45V	45	1100	60	600	900	80,0
DEMK-60V	60	1100	60	600	900	80,0

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**DEMK-V SERIES**  
**VILLA TYPE ELECTRIC HEATING TANKS – PRODUCT SELECTION TABLE**

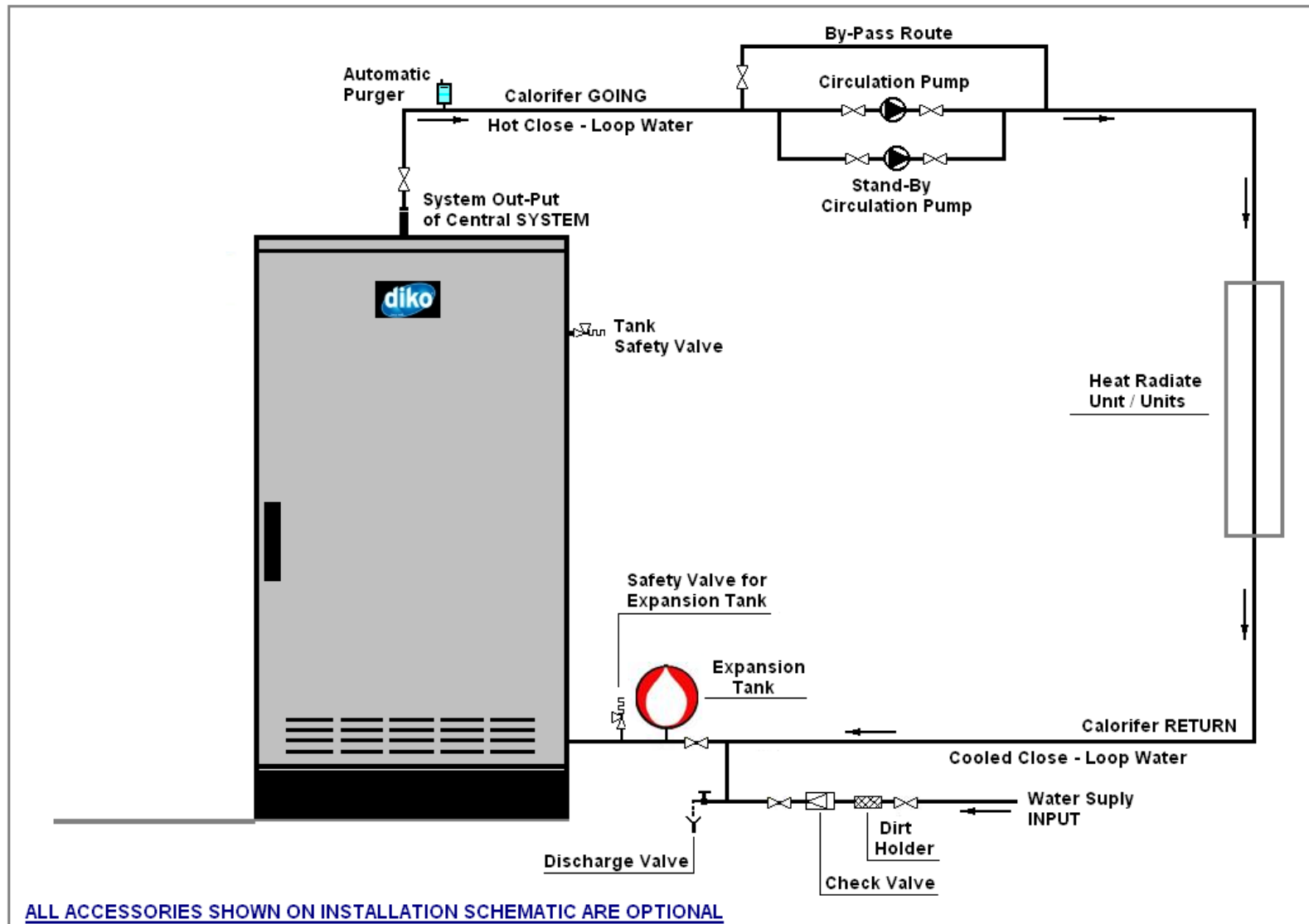


MODEL	POWER (liter)	HEATER QUANTITY (pcs)	HEATER POWER (KW)	Hot Water Flow (liter/hour) 15°C - 60°C 69°F - 140°F	VOLTAGE OPTIONS	FREQUENCY
DEMK-22,5V	22,5	3	7,5	430	380-400-415-440	50-60 Hz
DEMK-30V	30	3	10	573	380-400-415-440	50-60 Hz
DEMK-45V	45	6	7,5	860	380-400-415-440	50-60 Hz
DEMK-60V	60	6	10	1147	380-400-415-440	50-60 Hz

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## ADVISED INSTALLATION SCHEMATIC FOR DEMK SERIE ELECTRIC CALORIFER TANKS





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