

### 1. Details

The heating system must comply with the provisions outlined in the dual-energy rate section in the *Electricity Rates*, in particular the following provision: “The capacity of the dual-energy system in fuel mode must be sufficient to heat the premises in question. The energy sources of the dual-energy system must not be used simultaneously.”

### 2. Control equipment

The control equipment must meet the following conditions:

Connection:	<ul style="list-style-type: none"> <li>According to the Control Equipment Connection Diagram presented below.</li> </ul>
Indicator light:	<ul style="list-style-type: none"> <li>Optional installation for residential customers – Supplied free of charge by Hydro-Québec and installed at the customer’s expense, if applicable. Installation is not necessary for business customers.</li> </ul>
Dual-energy controller:	<ul style="list-style-type: none"> <li>Supplied and installed by Hydro-Québec.</li> <li>Supplies the indicator light with voltage of 12 V or 24 V, alternating current, depending on the model.</li> <li>Single-pole double-throw contact (NO/NC; 30 V; 0.5 A).</li> </ul>
Cables:	<ul style="list-style-type: none"> <li>Supplied and installed by the contractor at the customer’s expense.</li> <li>Five- or six-conductor (AWG 22) cable between the transition terminal block and the meter.</li> <li>Polyethylene insulation (cables and conductors).</li> <li>Operating voltage of 12 V or 24 V, alternating current.</li> <li>Protected against ultraviolet radiation, for outdoor use.</li> </ul>
Transition terminal block:	<ul style="list-style-type: none"> <li>Supplied and installed by the contractor at the customer’s expense.</li> <li>Minimum insulation voltage: 300 V.</li> <li>Minimum current: 25 A at 30°C.</li> </ul>
Indoor meter:	<ul style="list-style-type: none"> <li>Hydro-Québec sensor installed outdoors in a box usually affixed to the service mast.</li> <li>Location of box determined during a meeting between the contractor and Hydro-Québec.</li> <li>Maximum distance of 30 m between the controller and the outdoor sensor.</li> <li>Contractor must drill a hole at least 11 mm (7/16 in.) in diameter through the wall(s) in order to run a cable between the controller and the sensor box.</li> <li>Three-conductor (AWG 20) cable supplied and installed by the contractor at the customer’s expense.</li> <li>Polyethylene insulation (cables and conductors), protected against ultraviolet radiation, for outdoor use.</li> </ul>
Remote metering:	<ul style="list-style-type: none"> <li>Permitted maximum distance of 300 m.</li> <li>Cable gauge and type determined by distance and type of installation (outdoor or underground).</li> <li>Possibility of using a remote communication device between the controller and the automatic switching device (carrier or RF device, etc.), to be approved by Hydro-Québec prior to installation.</li> <li>Device supplied and installed by the contractor at the customer’s expense.</li> </ul>

### 3. Meter location and clearance

The existing meter socket must allow for the safe installation and connection of the controller.

The following minimum clearances must be respected:

In front of the socket: ..... 1 m	To the left and right of the meter: ... 100 mm
Above the meter: ≤200-A installation: ..... 100 mm	Below the meter: ..... 150 mm
400-A installation: ..... 150 mm	

Some exceptions may apply, in particular for metering centres.

### Important

If the electrical installation is not in compliance with the version of Standard E.21-10 in effect at the time of the initial connection or does not meet the minimum clearances specified above, the customer is not eligible for the dual-energy rate unless the necessary modifications are undertaken at the customer’s expense.

For dual-energy installations, 320-A single-phase meter sockets and polyphase meter sockets are not authorized (see Table 11 in Standard E.21-10).

In the event that the specifications outlined in this document cannot be respected, the contractor must contact Hydro-Québec before work begins.

**CONTROL EQUIPMENT CONNECTION DIAGRAM**

