Start up guide
and basic configuration

Y series and in.xe

GECKO®

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Warning

WARNINGS:

Before installing or connecting the unit, please read the following.

* FOR UNITS FOR USE IN OTHER THAN SINGLE-FAMILY DWELLINGS, A CLEARLY LABELED EMERGENCY SWITCH SHALL BE PROVIDED AS PART OF THE INSTALLATION. THE SWITCH SHALL BE READILY ACCESSIBLE TO THE OCCUPANTS AND SHALL BE INSTALLED AT LEAST 5' (1.52 M) AWAY, ADJACENT TO, AND WITHIN SIGHT OF THE UNIT.

* ANY DAMAGED CABLE MUST BE IMMEDIATELY REPLACED BY QUALIFIED PERSONNEL.

* TURN POWER OFF BEFORE SERVICING OR MODIFYING ANY CABLE CONNECTIONS IN THIS UNIT.

* TO PREVENT ELECTRIC SHOCK HAZARD AND/OR WATER DAMAGE TO THIS CONTROL, ALL UNUSED BUSHING CONDUITS MUST BE PLUGGED WITH THE ATTACHED NIPPLE.

* THIS CONTROLLER MUST NOT BE INSTALLED IN PROXIMITY OF HIGHLY FLAMMABLE MATERIALS.

* LOW SUPPLY VOLTAGE OR IMPROPER WIRING MAY CAUSE DAMAGE TO THIS CONTROL SYSTEM. READ AND FOLLOW ALL WIRING INSTRUCTIONS WHEN CONNECTING TO POWER SUPPLY.

* THIS PACK CONTAINS NO USER SERVICEABLE PARTS. CONTACT AN AUTHORIZED SERVICE CENTER FOR SERVICE.

* ALL CONNECTIONS MUST BE MADE BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ANY STATE, PROVINCIAL OR LOCAL ELECTRICAL CODE IN EFFECT AT THE TIME OF THE INSTALLATION.

* PRODUCT MUST BE DISPOSED OF SEPARATELY IN ACCORDANCE WITH LOCAL WASTE DISPOSAL LEGISLATION.

* THIS APPLIANCE IS NOT INTENDED FOR USE BY PERSONS (INCLUDING CHILDREN) WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPABILITIES, OR LACK OF EXPERIENCE AND KNOWLEDGE, UNLESS THEY HAVE BEEN GIVEN SUPERVISION OR INSTRUCTION CONCERNING USE OF THE APPLIANCE BY A PERSON RESPONSIBLE FOR THEIR SAFETY.

* CHILDREN SHOULD BE SUPERVISED TO ENSURE THAT THEY DO NOT PLAY WITH THE APPLIANCE.

* MEANS FOR DISCONNECTION MUST BE INCORPORATED IN THE FIXED WIRING IN ACCORDANCE WITH THE WIRING RULES.

* CAUTION: IN ORDER TO AVOID A HAZARD DUE TO INADVERTENT RESETTING OF THE THERMAL CUT-OUT, THIS APPLIANCE MUST NOT BE SUPPLIED THROUGH AN EXTERNAL SWITCHING DEVICE, SUCH AS A TIMER, OR CONNECTED TO A CIRCUIT THAT IS REGULARLY SWITCHED ON AND OFF BY THE UTILITY.

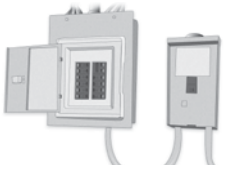
* PARTS CONTAINING LIVE PARTS, EXCEPT PARTS SUPPLIED WITH SAFETY EXTRA-LOW VOLTAGE NOT EXCEEDING 12 V, MUST BE INACCESSIBLE TO A PERSON IN THE BATH OR SPA.

* PARTS INCORPORATING ELECTRICAL COMPONENTS, EXCEPT REMOTE CONTROL DEVICES, MUST BE LOCATED OR FIXED SO THAT THEY CANNOT FALL INTO THE BATH OR SPA.

* PARTS ARE TO BE INSTALLED IN THE CORRECT ZONE AND EQUIPOTENTIAL BONDING CARRIED-OUT IN ACCORDANCE WITH THE WIRING RULES.

*CLEARANCE AND MINIMUM DISTANCE BETWEEN THE VARIOUS PARTS OF THE APPLIANCE AND THE SURROUNDING STRUCTURE ARE NOT SPECIFIED AS LONG AS THEY ARE SUFFICIENT SO THAT THE AMBIENT TEMPERATURE AROUND THE CONTROLLER DOES NOT EXCEED 60°C

Power up and breaker setting



IMPORTANT Please read the following before starting the device.

Verify that all accessories are linked to the ground lug and connected to the to the control system.

A minimum flow of 68 LPM (18 GPM) is required. Make sure that all valves are open in the spa plumbing and that the water flow is sufficient between the main pump and the water heater.

Turn on the breaker.

in.flo dry-fire protection

At start up, the in.flo's detector verifies the water flow according to the following sequence:

The Pump 1 or the circulation pump runs for a period of 2 to 5 minutes.

The display will show "- - -" during the flow verification. After this time, the system confirms if flow is adequate or not.

If the flow is sufficient, the temperature of the water is displayed on the keypad screen. When the water has reached the consigned temperature plus 0.45°C (0.8°F), the water heater turns off.

Display sequence at start up (every parameter is displayed for 2 seconds)

Lamp test

All segments and LEDs light up.

Software number

Software revision

Low-level selected

Low-level selected from the low-level menu.

Power up and breaker setting

It is important to specify the current rating of the GFCI/RCD used to ensure a safe and efficient current management (and reduce nuissance GFCI/RCD trippings).

Press and hold the **Prog**. button until you access the breaker setting menu. (the programming menu will appear first). If your control system is equipped with the phase configuration menu, it will appear before the breaker setting menu.

Note: if the keypad does not have the Prog. Key, use the Light key.

Choose the number of phases supplying your spa (1 to 3). Use the **Up** or **Down** keys to select the number of phases and press on the **Prog**. key to confirm your selection.

in.yj

Selecting number of phases	
UL	Menu not available
CE	1 or 2

in.ye et in.yt

Selecting number of phases	
UL	Menu not available
CE	1, 2 or 3
UL Swim*	1 or 2
CE Swim*	1, 2 or 3

**For more information see the Swim spa system Techbook.*

in.xe

Selecting number of phases	
UL	Menu not available
CE	1 or 2
UL Swim*	1 or 2
CE Swim*	1, 2 or 3

**For more information see the Swim spa system Techbook.*

The values displayed by the system correspond to 80% of the maximum amperage capacity of the GFCI.

Use the **Up** or **Down** keys to choose the desired value.

The value can typically be modified from 10 to 48 A.

Press on the **Prog**. key to set the breaker rating.

The tables below indicate the typical value of b for different GFCI/RCD ratings. Choose the one that corresponds to your breaker.

Note: Every OEM has its own pre-established configurations.

in.yj

GFCI/RCD	b
50A	40A*
40A	32A
30A	24A
20A	16A
16A	12.8A
15A	12A

in.ye et in.yt

GFCI/RCD	b
60A	48A
50A	40A
40A	32A
30A	24A
20A	16A

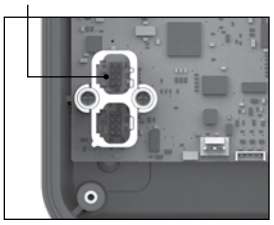
in.xe

GFCI/RCD	b
60A	48A
50A	40A
40A	32A
30A	24A
20A	16A

** Only available on in.yj-3.*

Programming the control system with in.stik

Communication port



in.yj

Follow these simple steps to upload new pre-determined low-level configurations to the control system.

Cut the power.

For the Y series control systems remove the lid to access the in.link low voltage connectors situated inside the system. Connect the in.stik to the communication port (see in.yj, in.ye-V3, in.ye and in.yt image above).

For in.xe control systems, connect the in.stik to the front side communication port (see in.xe image above).

Finish off by starting up the control system.

Communication port

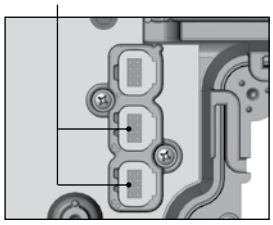
in.ye-V3

When starting up, the control system will download the different low-level configurations from the in.stik's memory. The low-level selection menu will then appear.

The keypad will display **L xx**. "**xx**" corresponds to the number of the first low-level configuration downloaded into the system's internal memory.

Use the **Up/Down** keys to select the desired low-level configuration.

Communication ports

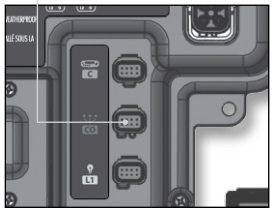


in.ye et in.yt

Press on the **Prog**. key to confirm the chosen configuration.

Note: if the keypad does not have the Prog. Key, use the Light key.

Communication port



in.xe

If, at start up, the keypad displays a flashing "**L xx**", all low-level configurations have been downloaded but none has been selected.

If you have an error message, please refer to the Troubleshooting Guide.

Note: Once you have finished programming, do not forget to cut the power, remove the in.stik and close the cover of the control system.

Programming the control system

Programming the control system with the keypad

Although every control system of the Y series and in.xe are factory configured, in certain cases, during maintenance or replacement of the equipment, it may be necessary to select a new pre-determined low-level configuration.

Complete the next few steps to get to the low-level configuration selection menu.

Press and hold the **Pump 1** key for 30 seconds.

The keypad will display **L xx**. "**xx**" corresponds to the number of the low-level configuration presently used by the system.

Use the **Up/Down** keys to select the new low-level configuration.

Press on the **Prog**. key to confirm the chosen configuration.

After 25 seconds, if you have not pressed the **Prog**. key, the system will exit the menu without saving any changes made to the settings.

*Note: if the keypad does not have the **Prog.** Key, use the **Light** key.*

Field programming options for control systems

If none of the pre-programmed low-level configurations in the control system suits your spa model, it is possible to have a personalised system configuration by entering manually the setting parameters (see the corresponding table for your spa's control system).

To get to this menu, press on the **Prog** (or **Light**) key for 30 seconds. Use the **Up/Down** keys to choose settings. Press on the **Prog** (or **Light**) key to go to the next parameter.

The available parameters depend on the model.

Field programming is only available on certain keypad models.

Please note that for in.xe controls, depending of your software revision, you may need to refer to tables 2 and 3 used with older versions.

Table 1 is used with the most recent versions of the software. The first parameter will indicates which table to refer to. (1__ = Table 1 or 2) et (P1_ = Table 3).

Definitions Table

Parameter	Description
--	Output not used
1H	Pump 1 high speed (or P1 if only one speed)
1L	Pump 1 low speed
2H	Pump 2 high speed (or P2 if only one speed)
2L	Pump 2 low speed
3H	Pump 3 high speed (or P3 if only one speed)
3L	Pump 3 low speed
4H	Pump 4 high speed (or P4 if only one speed)
4L	Pump 4 low speed
P5	Pump 5 (always single-speed)
BL	Blower

Parameter	Description
CP	Circulation pump
O3	Ozone generator
L2	Light 120V/240V
H	Heater
Fn *1	Fan
On	Always on output (simulates a direct)
Pr *2	Protective relay
H2 *1	Secondary heater
FA *3	Fountain
AU *3	Auxiliary

[1] Available for in.ye and in.yt only.
[2] Available for in.yj only.
[3] Available for in.yj, in.ye and in.yt only.

Table 1 – in.yj, in.ye, in.yt and in.xe

Parameter	Screen	Options	Description
Output 1	1.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL, CP,O3,L2,H,FN,ON,PR,H2,FA,AU	Accessory connected to the relay of output 1
Output 2	2.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL, CP,O3,L2,H,FN,ON,PR,H2,FA,AU	Accessory connected to the relay of output 2
Output 3	3.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL, CP,O3,L2,H,FN,ON,PR,H2,FA,AU	Accessory connected to the relay of output 3

Table 1 (continued) – in.yj, in.ye, in.yt and in.xe

Parameter	Screen	Options	Description
Output 4	4.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL, CP,O3,L2,H,FN,ON,PR,H2,FA,AU	Accessory connected to the relay of output 4 **available for in.ye, in.yt and in.xe*
Output 5	5.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL, CP,O3,L2,H,FN,ON,PR,H2,FA,AU	Accessory connected to the relay of output 5 **available for in.ye, in.yt and in.xe*
Output 6	6.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL, CP,O3,L2,H,FN,ON,PR,H2,FA,AU	Accessory connected to the relay of output 6 **available for in.ye-V3 and in.yt*
Output 7	7.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL, CP,O3,L2,H,FN,ON,PR,H2,FA,AU	Accessory connected to the relay of output 7 **available for in.yt*
Output 8	8.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL, CP,O3,L2,H,FN,ON,PR,H2,FA,AU	Accessory connected to the relay of output 8 **available for in.yt*
Output 9	9.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL, CP,O3,L2,H,FN,ON,PR,H2,FA,AU	Accessory connected to the relay of output 9 **available for in.yt*
Output 10	A.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL, CP,O3,L2,H,FN,ON,PR,H2,FA,AU	Accessory connected to the relay of output 10 **available for in.yt*
Output 11	b.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL, CP,O3,L2,H,FN,ON,PR,H2,FA,AU	Accessory connected to the relay of output 11 **available for in.yt*
Output 12	C.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL, CP,O3,L2,H,FN,ON,PR,H2,FA,AU	Accessory connected to the relay of output 12 **available for in.yt*
Direct output 1	d.__	--,CP	Accessory connected to the direct output 1
Direct output 2	E.__	--,CP	Accessory connected to the direct output 2 **available for in.yt*
Heater	H.__	--,H,H2	Accessory connected to the heater relay
CP usage	CU._	CP standard = 0 CP always on = 1	Usage of the circulation pump
Ozonator usage	oU._	Ozonator with filtration = 0 Ozonator always on = 1	Usage of the ozone generator
Ozonator pump	oP._	Circulation pump = 0 Pump 1 = 1	Pump associated with the ozone generator
Ozonator type	o._	Standard (UV) = 0 Timed (Corona) = 1	Ozone generator type
Heater pump	HP._	Circulation pump = 0 Pump 1 = 1	Pump associated with the heater
Filter config.	FL._	Purge only = 0 With circ. Pump = 1 With Pump 1 low speed = 2 With Pump 1 low speed and 2 different durations = 3	Configuration of the filtration cycle
Temp. units	Un._	°F = 0 °C = 1	Displayed temperature unit
Clock format	CL._	No time displayed = 0 AM/PM mode = 1 24H mode = 2	Clock display mode
Cool down	C.__	30 to 240 seconds	Cool down of the heating element in seconds
Output 1 current	1.__	0 to 15 amps 0 to 20 amps (*in.xe only*)	Current of accessory connected to output 1
Output 2 current	2.__	0 to 15 amps	Current of accessory connected to output 2
Output 3 current	3.__	0 to 15 amps	Current of accessory connected to output 3

Field programming options for control systems

Table 1 (continued) – in.yj, in.ye, in.yt and in.xe

Parameter	Screen	Options	Description
Output 4 current	4.__	0 to 15 amps	Current of accessory connected to output 4 **available on in.ye, in.yt and in.xe*
Output 5 current	5.__	0 to 15 amps	Current of accessory connected to output 5 **available on in.ye, in.yt and in.xe*
Output 6 current	6.__	0 to 15 amps	Current of accessory connected to output 6 **available for in.ye-V3 and in.yt*
Output 7 current	7.__	0 to 15 amps	Current of accessory connected to output 7 **available on in.yt*
Output 8 current	8.__	0 to 15 amps	Current of accessory connected to output 8 **available on in.yt*
Output 9 current	9.__	0 to 20 amps	Current of accessory connected to output 9 **available on in.yt*
Output 10 current	A.__	0 to 15 amps	Current of accessory connected to output 10 **available on in.yt*
Output 11 current	b.__	0 to 15 amps	Current of accessory connected to output 11 **available on in.yt*
Output 12 current	C.__	0 to 15 amps	Current of accessory connected to output 12 **available on in.yt*
Direct 1 current	d.__	0 to 5 amps	Current of accessory connected to direct output 1
Direct 2 current	E.__	0 to 5 amps	Current of accessory connected to direct output 2 **available for in.yt*
Heater current	H.__	0 to 17 amps 0 to 23 amps (*in.ye, in.yt and in.xe only*)	Current of the heater
CE configuration	CE_	UL = 0 CE/AUS/NZ = 1	CE/AUS/NZ or UL
Number of phases	P.__	**in.yj** 1 (UL) 1 or 2 (CE) **in.ye and in.yt** **Standard** 1 (UL) 1, 2 or 3 (CE) **Swim Spa** 1 or 2 (UL) 1, 2 or 3 (CE) **in.xe** **Standard** 1 (UL) 1 or 2 (CE) **Swim Spa** 1 or 2 (UL) 1, 2 or 3 (CE)	**Number of phases/breaker** **Selection of number of phases (in.yj)** UL: Menu not available CE: 1 or 2 **Selection of number of phases (in.ye and in.yt)** UL: Menu not available CE: 1, 2 or 3 UL Swim: 1 or 2 CE Swim: 1, 2 or 3 **Selection of number of phases (in.xe)** UL: Menu not available CE: 1 or 2 UL Swim: 1 or 2 CE Swim: 1, 2 or 3
Input current	b.__	**in.yj** 10 to 40A (UL and CE) 10 to 20A (CE) **in.ye and in.yt** **Standard** 10 to 48A single phase (UL and CE) 10 to 20A dual phase (CE) 10 to 16A triple phase (CE) **Swim Spa** 10 to 48A single phase (UL and CE) 10 to 48A dual phase (UL and CE) 10 to 20A triple phase (CE) **in.xe** **Standard** 10 to 48A single phase (UL) 10 to 40A single phase (CE) 10 to 20A dual phase (CE) **Swim Spa** 10 to 48A single phase (UL) 10 to 40A single phase (CE) 10 to 48A dual phase (UL) 10 to 40A dual phase (CE) 10 to 20A triple phase (CE)	Available household current **Maximum input current (in.yj)** UL: 1 phase 40, 2 phases na, 3 phases na CE: 1 phase 40, 2 phases 20, 3 phases na **Maximum input current (in.ye et in.yt)** UL: 1 phase 48, 2 phases na, 3 phases na CE: 1 phase 48, 2 phases 20, 3 phases 16 UL Swim: 1 phase 48, 2 phases 48, 3 phases na CE Swim: 1 phase 48, 2 phases 48, 3 phases 20 **Maximum input current (in.xe)** UL: 1 phase 48, 2 phases na, 3 phases na CE: 1 phase 40, 2 phases 20, 3 phases na UL Swim: 1 phase 48, 2 phases 48, 3 phases na CE Swim: 1 phase 40, 2 phases 40, 3 phases 20

Table 2 – in.xe (older versions only)

Parameter	Screen	Options	Description
Output 1A	1.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL,CP,O3,L2,H	Accessory connected to the relay of output 1A
Output 1B	2.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL,CP,O3,L2,H	Accessory connected to the relay of output 1B
Output 2	3.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL,CP,O3,L2,H	Accessory connected to the relay of output 2A
Output 3	4.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL,CP,O3,L2,H	Accessory connected to the relay of output 3A
Output 4	5.__	--,1H,1L,2H,2L,3H,3L,4H, 4L,P5,BL,CP,O3,L2,H	Accessory connected to the relay of output 4A
Output 5	6.__	--, H	Accessory connected to the relay of output 5A
CP Usage	CU._	CP standard = 0 CP always on = 1	Usage of the circulation pump
Ozonator usage	OU._	Ozonator with filtration = 0 Ozonator always on = 1	Usage of the ozone generator
Ozonator pump	oP._	Circulation pump = 0 Pump 1 = 1	Pump associated with the ozone generator
Ozonator type	O._	Standard (UV) = 0 Timed (Corona) = 1	Ozone generator type
Heater pump	HP._	Circulation pump = 0 Pump 1 = 1	Pump associated with the heater
Filter config.	FL._	Purge only = 0 With circ. Pump = 1 With Pump 1 low speed = 2	Configuration of the filtration cycle
Temp. units	Un._	°F = 0 °C = 1	Displayed temperature unit
Clock format	CL._	No time displayed = 0 AM/PM mode = 1 24H mode = 2	Clock display mode
Cool down	C.__	30 to 240 seconds	Cool down of the heater element in seconds
Output 1A current	1.__	1 to 20 amps	Current of accessory connected to output 1A
Output 1B current	2.__	1 to 15 amps	Current of accessory connected to output 1B
Output 2 current	3.__	1 to 15 amps	Current of accessory connected to output 2A
Output 3 current	4.__	1 to 15 amps	Current of accessory connected to output 3A
Output 4 current	5.__	1 to 15 amps	Current of accessory connected to output 4A
Output 5 current	6.__	1 to 17 amps	Current of accessory connected to output 5A
Direct current	7.__	1 to 5 amps	Current of the direct output
Minimum input current	8.__	10 to 20	Minimum input current (breaker size)
Number of phases	P.__	1 or 2 (UL) 1, 2 or 3 (CE)	Number of phases/breaker
Input current	b.__	10 to 60 A single phase (UL and CE) 10 to 48 A dual phase (UL) 10 to 40 A dual phase (CE) 10 to 20 A triple phase (CE)	Available household current (Maximum input current)

Table 3 - in.xe (older versions only)

Parameter	Screen	Options	Description
Pump 1 config.	P 1_	Single speed = 1 Double speed = 2 *Pump 1 and Pump 3 = 3	Pump 1 configuration *Offered on certain models only.*
Pump 2 config.	P2_	Not installed = 0 Single speed = 1 Double speed = 2	Pump 2 configuration
Blower config.	bL_	Not installed = 0 Installed = 1	Blower configuration
Circ. Pump config.	CP_	Not installed = 0 Installed = 1 Activated = 2	Circulation pump configuration
Ozonator config.	oC_	Not installed = 0 Installed = 1 Activated = 2	Ozone generator configuration
Ozonator pump	oP_	Circulation pump = 0 Pump 1 = 1	Pump associated with the ozone generator
Ozonator type	o_	Standard = 0 Timed = 1	Ozone generator type
Heater pump	HP_	Circulation pump = 0 Pump 1 = 1	Pump associated with the heater
Filter config.	FL_	Purge only = 0 With circ. Pump = 1 With Pump 1 low speed = 2	Configuration of the filtration cycle
Temp. units	Un_	°F = 0 °C = 1	Displayed temperature unit
Clock format	CL_	No time displayed = 0 AM/PM mode = 1 Mode 24H = 2	Clock display mode
Pump 1 high speed Current	1__	1 to 20 amps (10)	Current of pump 1 high speed
Pump 1 low speed Current	2__	1 to 15 amps (4)	Current of pump 1 low speed
Pump 2 high speed Current	3__	1 to 15 amps (10)	Current of pump 2 high speed
Pompe 2 low speed Current	4__	1 to 15 amps (4)	Current of pump 2 low speed
Blower current	5__	1 to 10 amps (5)	Current of blower
Circ. Pump current	6__	1 to 5 amps (2)	Current of circulation pump
Direct current	7__	0 to 5 amps (1)	Current of the direct output
Heater current	8__	4 to 17 amps (17)	Heater current
Minimum input current	9__	10 to 20 amps	Minimum input current (breaker size)
Input current	b__	15 to 48 (on UL/CSA systems) (48) 15 to 32 (on CE systems) (32)	Available household current (Maximum input current)

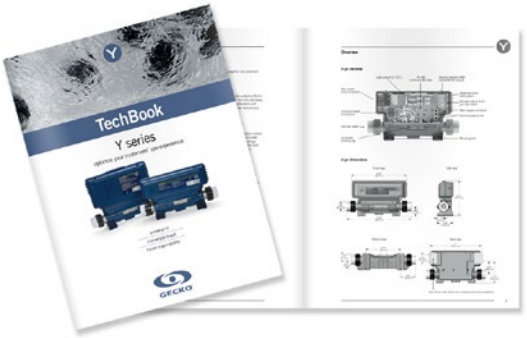
** Offered on certain models only.*

Specifications

For more information on the specifications concerning the outputs of a specific control system, refer to the corresponding techbook.

Techbook in.ye-V3

in.yj-V3 techbook



Y series techbook

in.xe techbook

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