Floatless Level Switch (Compact Type)
61F-G□N

CSM_61F-G_N_DS_E_3_5

Improved Design for a More Lightweight Construction and Reduced Standby Power Consumption.

- Standby power reduced to 85% or less of previous models. (Applicable to 61F-GN.)
- Weighs only 85% or less of previous models. (Applicable to 61F-G3N/-G4N.)
- Easy identification of operating status with LED operation indicator.
- Increased reliability of internal relay (micro load: 5 VDC, 1 mA) to enable PLC input.
- Electrode terminals and other wiring terminals are separated for easy wiring.
- Select from three mounting methods: JEM, DIN rail mounting, or screw mounting.

Note: LED operation indicator is provided on Controllers manufactured in August 1999 or later.

⚠ **Refer to *Safety Precautions for Floatless Level Controllers*.**

61F-G□N (120/240 VAC) in this catalog have been discontinued at the end of March 2018.

Model Number Structure

■ Model Number Legend

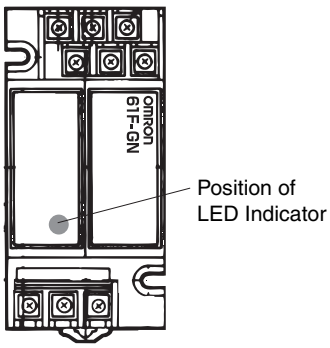
61F-□N□
1 2

1. Controller Application

- G: Automatic water supply and drainage
- G1: Automatic water supply with idling prevention or water shortage alarm
- G2: Automatic water supply and drainage with abnormal water increase alarm
- G3: Automatic water supply and drainage with full tank and water shortage alarm
- G4: Automatic water supply with water level indicator for water supply tank and water receiving tank and prevention of idling due to water shortage
- I: Liquid level indication and alarm (no two-wire models)

2. Type

- Blank: General-purpose
- L 2KM: Long-distance (for 2 km)
- L 4KM: Long-distance (for 4 km)
- H: High-sensitivity
- D: Low-sensitivity
- R: Two-wire



Note: LED indicator is provided on Controllers manufactured in August 1999 or later.
It is not mounted on the case surface. It can be seen through the case.

Ordering Information

Classification by control purpose		Classification by application	Set contents	General-purpose	Long-distance (between Controller and Electrodes) (See note 2.)	High-sensitivity (for high specific resistance)	Low-sensitivity (for low specific resistance)	Two wire
Controller	GN Models	◆	61F-GN Base x 1 61F-11□ Units x 1	61F-GN ✻	61F-GNL ✻	61F-GNH ✻	61F-GND ✻	61F-GNR ✻
	G1N Models	▲ w/pump idling prevention	61F-G1N Base x 1 61F-11□ Units x 2	61F-G1N ✻	61F-G1NL ✻	61F-G1NH ✻	61F-G1ND ✻	61F-G1NR ✻
		▲ w/alarm for abnormally low level						
	G2N Models	◆ w/alarm for abnormally high level	61F-G2N Base x 1 61F-11□ Units x 2	61F-G2N ✻	61F-G2NL ✻	61F-G2NH ✻	61F-G2ND ✻	61F-G2NR ✻
	G3N Models	◆ w/alarm for abnormally high and low levels	61F-G3N Base x 1 61F-11□ Units x 3	61F-G3N ✻	61F-G3NL ✻	61F-G3NH ✻	61F-G3ND ✻	61F-G3NR ✻
	G4N Models	▲ w/level display of water source and tank	61F-G4N Base x 1 61F-11□ Units x 5 MY3 Relay x 1	61F-G4N ✻	61F-G4NL ✻	61F-G4NH ✻	61F-G4ND ✻	61F-G4NR ✻
	IN Models	Level indication with alarm	61F-IN Base x 1 61F-11□ Units x 2	61F-IN ✻	61F-INL ✻	61F-INH ✻	61F-IND ✻	61F-INR
Relay unit			61F-11□ Units x 1	61F-11N	61F-11NL	61F-11NH	61F-11ND	61F-11NR

Note: 1. ◆: Automatic water supply and drainage control, ▲: Automatic water supply control

2. Subclassified into 2 km and 4 km models according to the model of relay unit used. Specify 2 km or 4 km when ordering.

3. When ordering, specify the desired operating voltage at the end of the model number.

Example: 61F-GN[110/220 VAC]
└——— Desired supply voltage

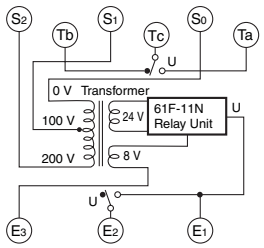
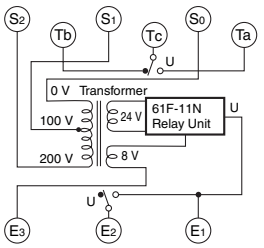
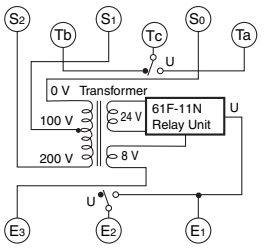
4. Contact your OMRON representative for products with voltages other than those listed above.

5. If you order with a standard model number, the corresponding Relay Units are also delivered as part of a set.
If you order the 61F-GN, one 61F-11 Relay Unit is included in the set.

✻ 61F-G□N (120/240 VAC) in this catalog have been discontinued at the end of March 2018.

Specifications

Standard Models

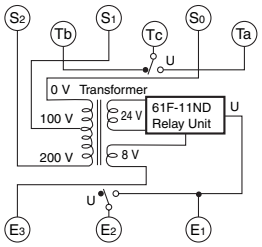
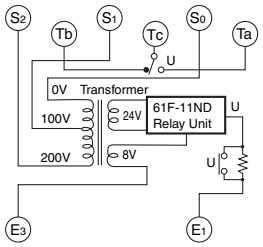
Items \ Type	General-purpose Controllers 61F-□N	Long-distance Controllers 61F-□NL 2KM (2 km) 61F-□NL 4KM (4 km)	High-sensitivity Controllers 61F-□NH
Controlling materials and operating conditions	For control of ordinary purified water and wastewater	For control of ordinary purified water and wastewater. Particularly in cases where the distance between the pumps and water tanks or between supply and receiver tanks are far apart or where remote control is required.	For control of liquids with high specific resistance, such as distilled water
Rated voltage	100/200, 110/220 or 120/240 VAC, 50/60 Hz (both supported on same model)		
Allowable voltage fluctuation range	85% to 110% of rated voltage		
Inter-electrode voltage	8 VAC		
Inter-electrode current	Approx. 1 mA AC max.		
Power consumption	GN□: 3 VA max., G1N□, G2N□, IN□: 4 VA max., G3N□: 5.5 VA max., G4N□: 8.5 VA max.		
Inter-electrode operation resistance (recommended values)	0 to approx. 4 kΩ	0 to 1.8 kΩ (for 2 km) 0 to 0.7 kΩ (for 4 km)	Approx. 10 kΩ to 40 kΩ (See note 4.)
Inter-electrode release resistance (recommended values)	Approx. 15 k to ∞Ω	4 k to ∞Ω (for 2 km) 2.5 k to ∞Ω (for 4 km)	Approx. 100 k to ∞Ω
Cable length (See note 2.)	1 km max.	2 km max. 4 km max.	50 m max.
Output	3 A, 200 VAC (Resistive load)		
Ambient operating temperature	−10 to 55°C		
Ambient operating humidity	45% to 85%		
Insulation resistance (See note 3.)	100 MΩ min. (at 500 VDC)		
Dielectric strength (See note 3.)	2,000 VAC, 50/60 Hz for 1 min.		
Life expectancy	Electrical: 250,000 operations min. Mechanical: 10,000,000 operations min.		
Weight	GN models: 315 g; G1N, G2N, IN models: 410 g; G3N models: 625g; G4N models: 870 g		
Internal Circuit Diagrams	Example: 61F-GN 	Example: 61F-GNL 	Example: 61F-GNH 

Note: 1. The □ in the model name represents G, G1, G2, G3, G4, or I.

2. The length when using completely insulated, 600-V, 3-core (0.75 mm^2) cabtire cables. Usable cable lengths will become shorter as the cable diameter or number of cores becomes larger due to increased floating capacity. For details, refer to *Safety Precautions for Floatless Level Controllers*.

3. The insulation resistance and dielectric strength are the values between power terminals and Electrode terminals, between power terminals and contact terminals, and between Electrode terminals and contact terminals. For details, refer to *Safety Precautions for Floatless Level Controllers*.

4. Application is possible with 10 kΩ or less, however, this may cause reset failures.

Items \ Type	Low-sensitivity Controller 61F-□ND	Two-wire Controller 61F-□NR
Controlling materials and operating conditions	For control of liquids with low specific resistance, such as salt water, wastewater, acid chemicals, or alkaline chemicals	For control of ordinary purified water or wastewater. Used with a Two-wire Electrode Holder (incorporating a resistor of 6.8 kΩ)
Rated voltage	100/200, 110/220 or 120/240 VAC, 50/60 Hz (supported by the same model)	
Allowable Voltage Fluctuation	85% to 110% of rated voltage	
Inter-electrode voltage	8 VAC	
Inter-electrode current	Approx. 1 mA AC max.	
Power consumption	GN□: 3 VA max., G1N□, G2N□, IN□: 4 VA max., G3N□: 5.5 VA max., G4N□: 8.5 VA max.	
Inter-electrode operation resistance (recommended values)	0 to approx. 1.8 kΩ	Approx. 0 to 1.1 kΩ
Inter-electrode release resistance (recommended values)	Approx. 5 k to ∞ Ω	Approx. 15 k to ∞ Ω
Cable length (See note 2.)	1 km max.	800 m max.
Output	3 A, 200 VAC (Resistive load)	
Ambient operating temperature	−10 to 55°C	
Ambient operating humidity	45% to 85%	
Insulation resistance (See note 3.)	100 MΩ min. (at 500 VDC)	
Dielectric strength (See note 3.)	2,000 VAC, 50/60 Hz for 1 min.	
Life expectancy	Electrical: 250,000 operations min. Mechanical: 10,000,000 operations min.	
Weight	GN models: 315 g; G1N, G2N, IN models: 410 g; G3N models: 625g; G4N models: 870 g	
Internal Circuit Diagrams	Example: 61F-GND 	Example: 61F-GNR 

Note: 1. The □ in the model name represents G, G1, G2, G3, G4, or I.

2. The length when using completely insulated, 600-V, 3-core (0.75 mm^2) cabtire cables. Usable cable lengths will become shorter as the cable diameter or number of cores becomes larger due to increased floating capacity. For details, refer to *Safety Precautions for Floatless Level Controllers*.

3. The insulation resistance and dielectric strength are the values between power terminals and Electrode terminals, between power terminals and contact terminals, and between Electrode terminals and contact terminals. For details, refer to *Safety Precautions for Floatless Level Controllers*.

4. Application is possible with 10 kΩ or less, however, this may cause reset failures.

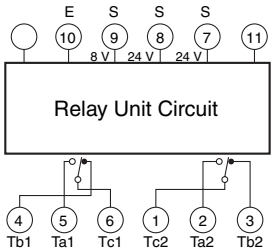
■ Relay Unit

The Relay Unit can be replaced without removing the wires for maintenance inspections. It can also be replaced with other Relay Units.

Compatibility with General Purpose Model (61F-11N)

General-purpose Controller	**61F-11N**	---
Long-distance Controllers	**61F-11NL (for 2 km)** **61F-11NL (for 4 km)**	Provided
High-sensitivity Controllers	**61F-11NH**	
Low-sensitivity Controller	**61F-11ND**	
Two-wire Controller	**61F-11NR**	Not provided

Terminal Arrangement



Ordering Example

If you order the components listed above, the corresponding Relay Unit will be supplied with the Controller.

Example: If a 61F-GN Controller is ordered, a 61F-11N Relay Unit will also be included.

■ Connections

Automatic Water Supply Control

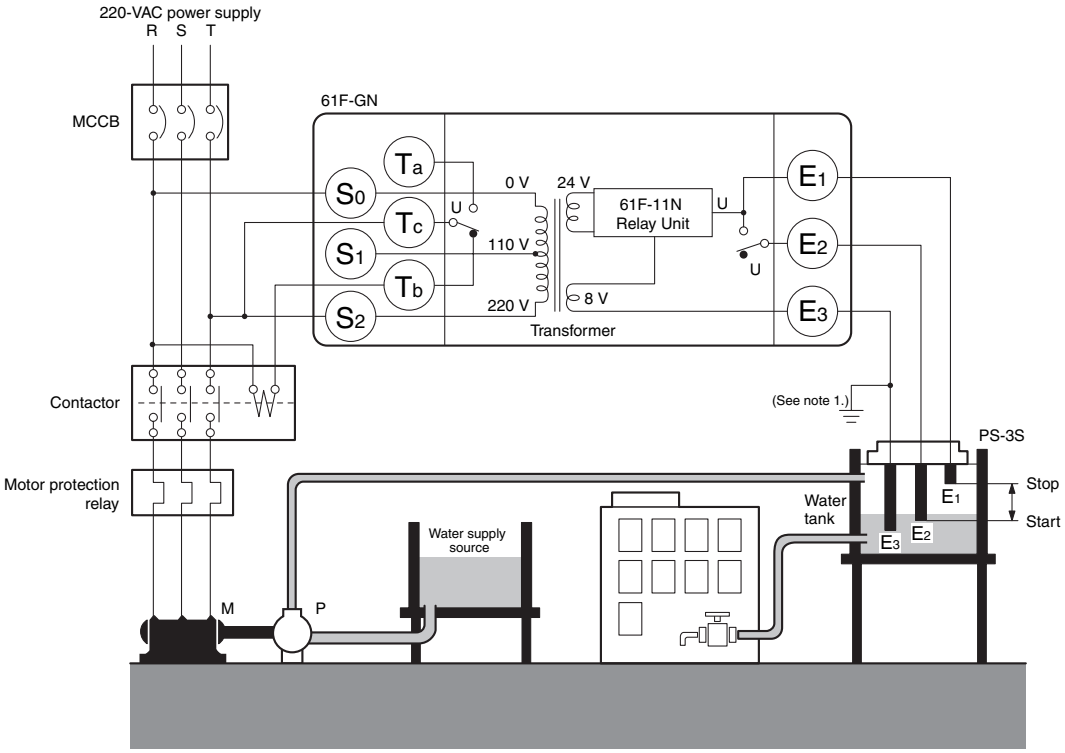
Compact Model
61F-GN

Dimensions
page 16

Automatic Water Supply Control

Connections

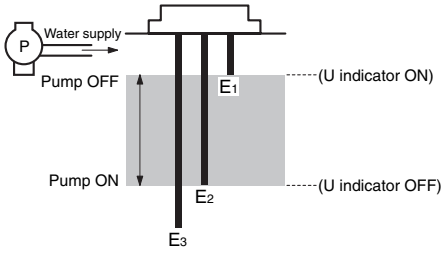
- Connect contactor coil terminal to Tb.
- Connect to power supply terminals.
  S_0-S_1: 110 VAC
  S_0-S_2: 220 VAC



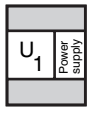
Note: 1. Be sure to ground the common Electrode E_3 (the longest Electrode).
2. The above wiring diagram is for a rated voltage of 110/220 VAC.

Principles of Operation

The pump stops (U indicator ON) when the water level reaches E_1 and starts (U indicator OFF) when the water level drops below E_2.



Relay Unit Layout



Automatic Drainage Control

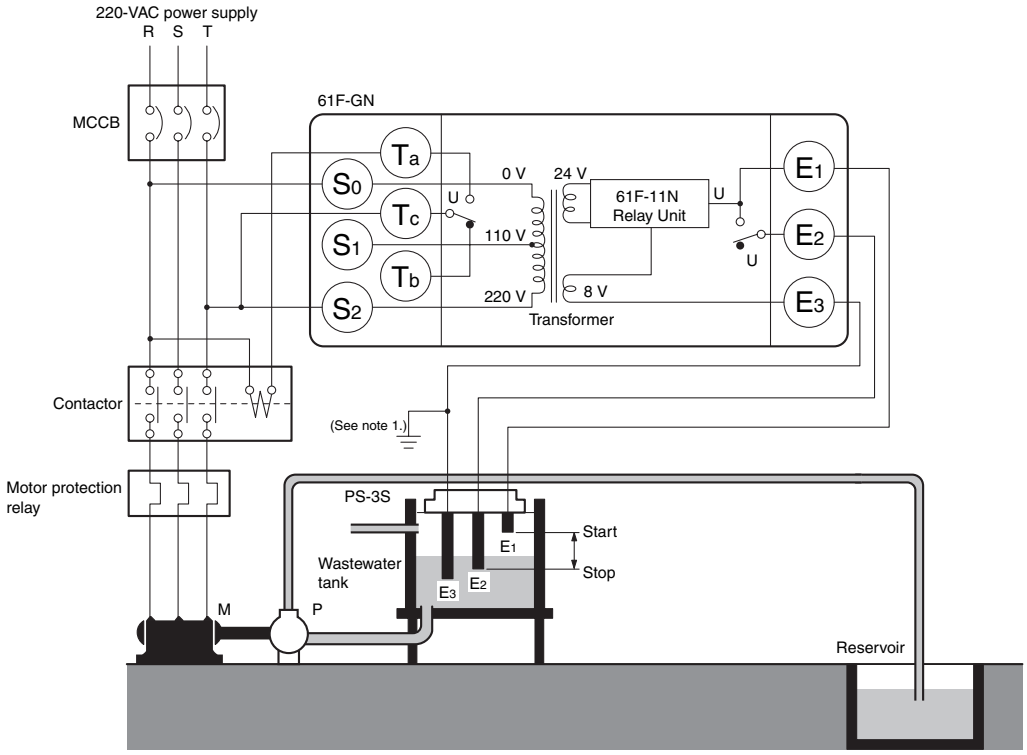
Compact Model
61F-GN

Dimensions
page 16

Automatic Drainage Control

Connections

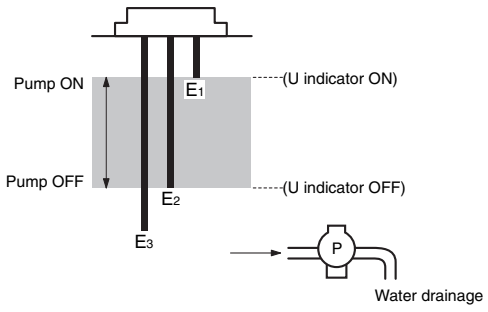
- Connect the contactor coil terminal to Ta.
- Connect to power supply terminals.
  S_0-S_1: 110 VAC
  S_0-S_2: 220 VAC



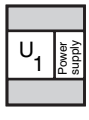
Note: 1. Be sure to ground the common Electrode E_3 (the longest Electrode).
2. The above wiring diagram is for a rated voltage of 110/220 VAC.

Principles of Operation

- The pump starts (U indicator ON) when the water level reaches E_1 and stops (U indicator OFF) when the water level drops below E_2.



Relay Unit Layout



Automatic Water Supply Control with Pump Idling Prevention

Compact Model 61F-G1N

Dimensions page 16

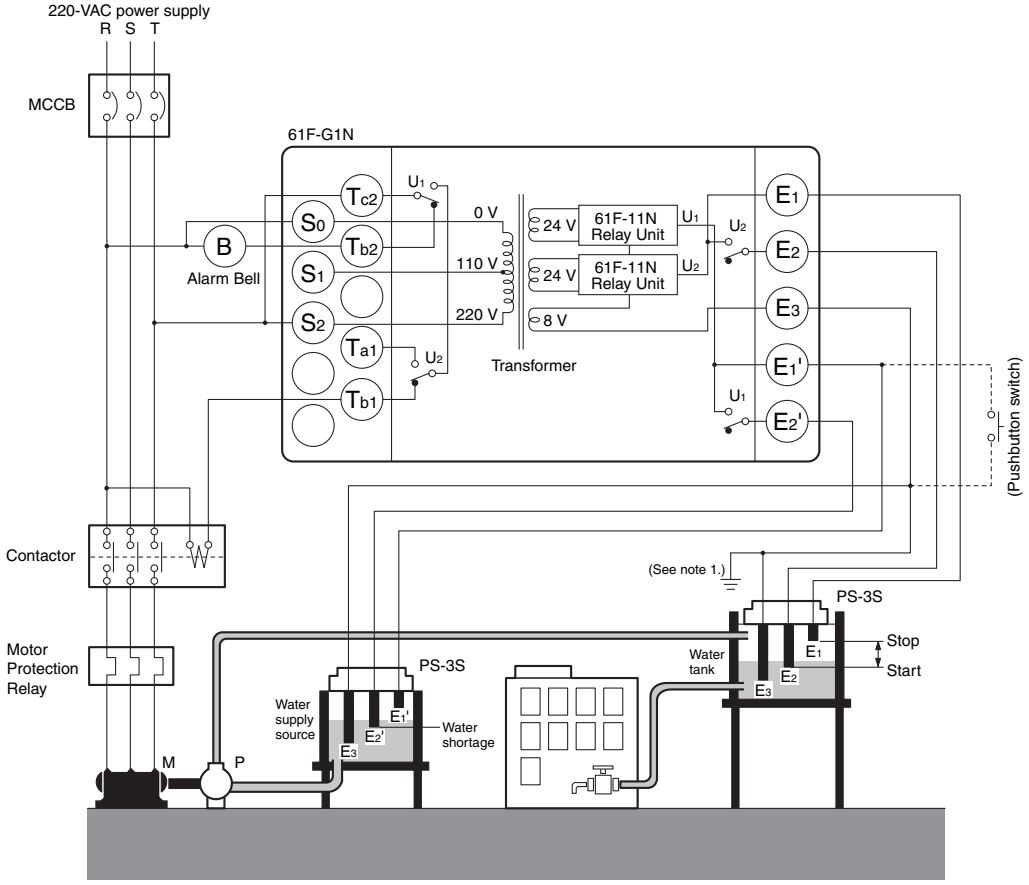
Automatic Water Supply Control with Pump Idling Prevention

Connections

- Connect to power supply terminals.
  S_0-S_1: 110 VAC
  S_0-S_2: 220 VAC
- Insert a pushbutton switch (NO contact) between E_1' and E_3 as shown by the dotted line.
- Do not press the pushbutton switch if the pump stops (U_1 indicator OFF) during normal operation after an alarm is given for a low water level (e.g., the water level does not reach E_2').

Test Operation/ Recovering from Power Interruptions

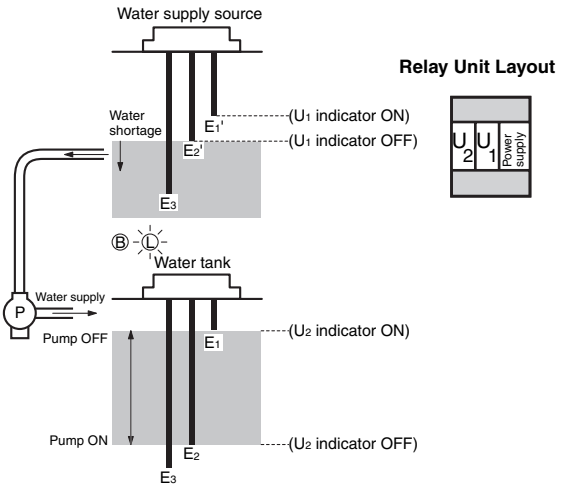
If the water supply source level has not yet reached E_1' when starting the pump or after recovering from a power interruption, press the pushbutton switch to start the pump (U_1 indicator ON) by momentarily short-circuiting E_1' and E_3.



Note: 1. Be sure to ground the common Electrode E_3 (the longest Electrode).
2. The above wiring diagram is for a rated voltage of 110/220 VAC.

Principles of Operation

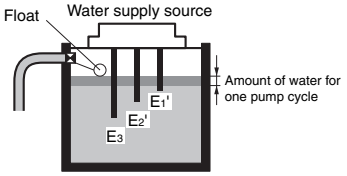
- The pump starts (U_2 indicator OFF) when the water level drops below E_2 and stops (U_2 indicator ON) when water level reaches E_1.
- The pump is forced to stop when the water supply source level drops below E_2' (U_1 indicator OFF) to prevent the pump from idling and gives an alarm.



Relay Unit Layout

Note

- Length of Electrode E_1'
  When installing the Controller in locations where there is a possibility of momentary power interrupts or blackouts, the length of E_1' should be made so that the amount of water corresponding to one pump cycle does not expose the Electrodes. This will prevent the E_2' self-holding circuit from failing.



Automatic Water Supply Control with Abnormal Water Shortage Alarm

Compact Model
61F-G1N

Dimensions
page 16

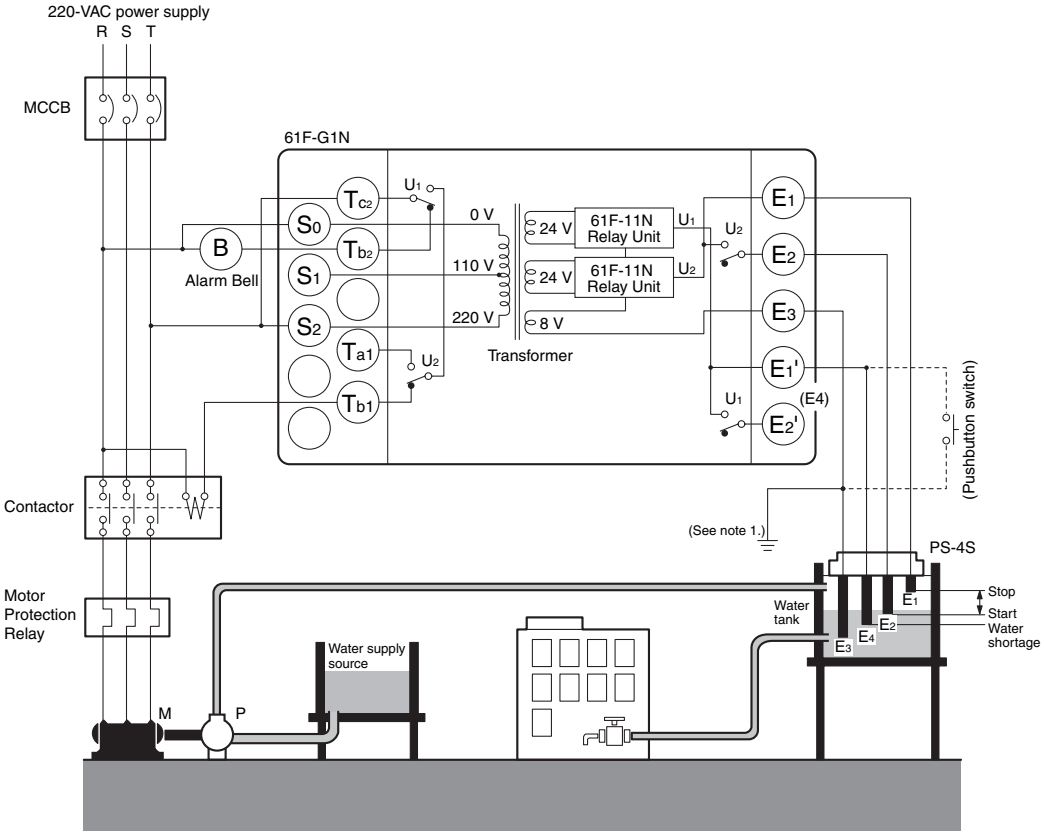
Automatic Water Supply Control with Abnormal Water Shortage Alarm

Connections

- Connect to power supply terminals.
  S_0-S_1: 110 VAC
  S_0-S_2: 220 VAC
- Insert a pushbutton switch (NO contact) between E_3 and E_4.
- If the pump stops upon releasing the pushbutton switch, keep pressing the pushbutton switch.
- Connect the E_4 electrode for the water shortage alarm to the E_1' terminal.

Test Operation/ Recovering from Power Interruptions

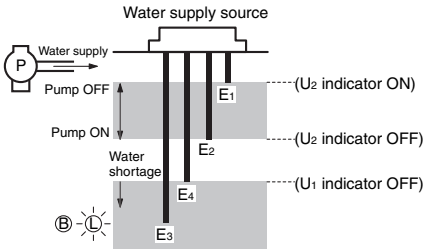
If the water level has not yet reached E_4 when starting the pump or after recovering from a power interruption, press the pushbutton switch to start the pump by short-circuiting E_3 and E_4 (U_1 indicator ON).



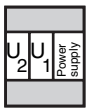
Note: 1. Be sure to ground the common Electrode E_3 (the longest Electrode).
2. The above wiring diagram is for a rated voltage of 110/220 VAC.

Principles of Operation

- The pump stops (U_2 indicator ON) when the water level reaches E_1 and starts (U_2 indicator OFF) when water level drops below E_2.
- If the water level drops below E_4 for any reason, an alarm is given (U_1 indicator OFF).

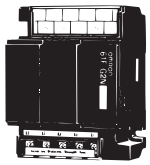


Relay Unit Layout



Automatic Water Supply with Abnormal Water Increase Alarm

Compact Model 61F-G2N

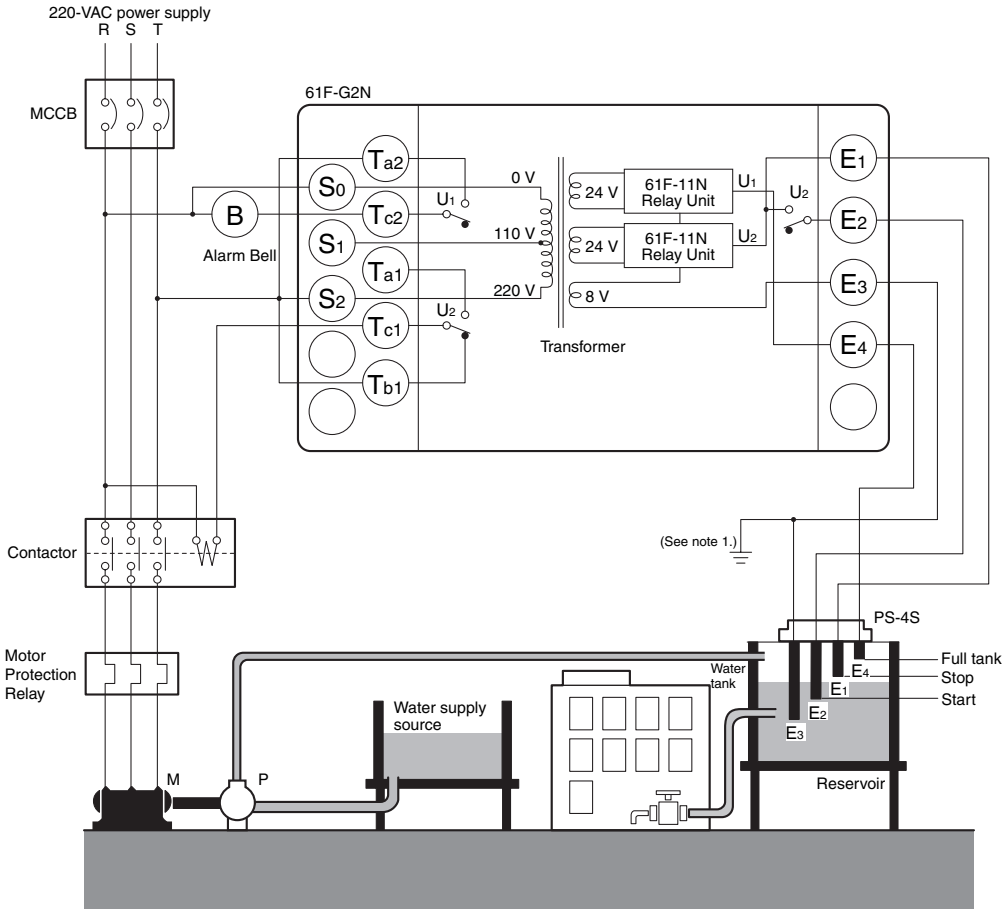


Dimensions page 16

Automatic Water Supply with Abnormal Water Increase Alarm

Connections

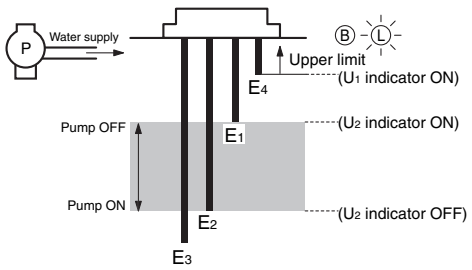
- Connect power supply terminal S_2 to terminal Tb_1.
- Connect to power supply terminals.
  S_0-S_1: 110 VAC
  S_0-S_2: 220 VAC



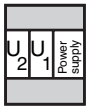
Note: 1. Be sure to ground the common Electrode E_3 (the longest Electrode).
2. The above wiring diagram is for a rated voltage of 110/220 VAC.

Principles of Operation

- The pump starts (U_2 indicator OFF) when the water level reaches E_2 and stops (U_2 indicator ON) when the water level rises above E_1.
- If the water level reaches E_4 for any reason, an alarm is given (U_1 indicator ON).



Relay Unit Layout



Automatic Drainage Control with Abnormal Water Increase Alarm

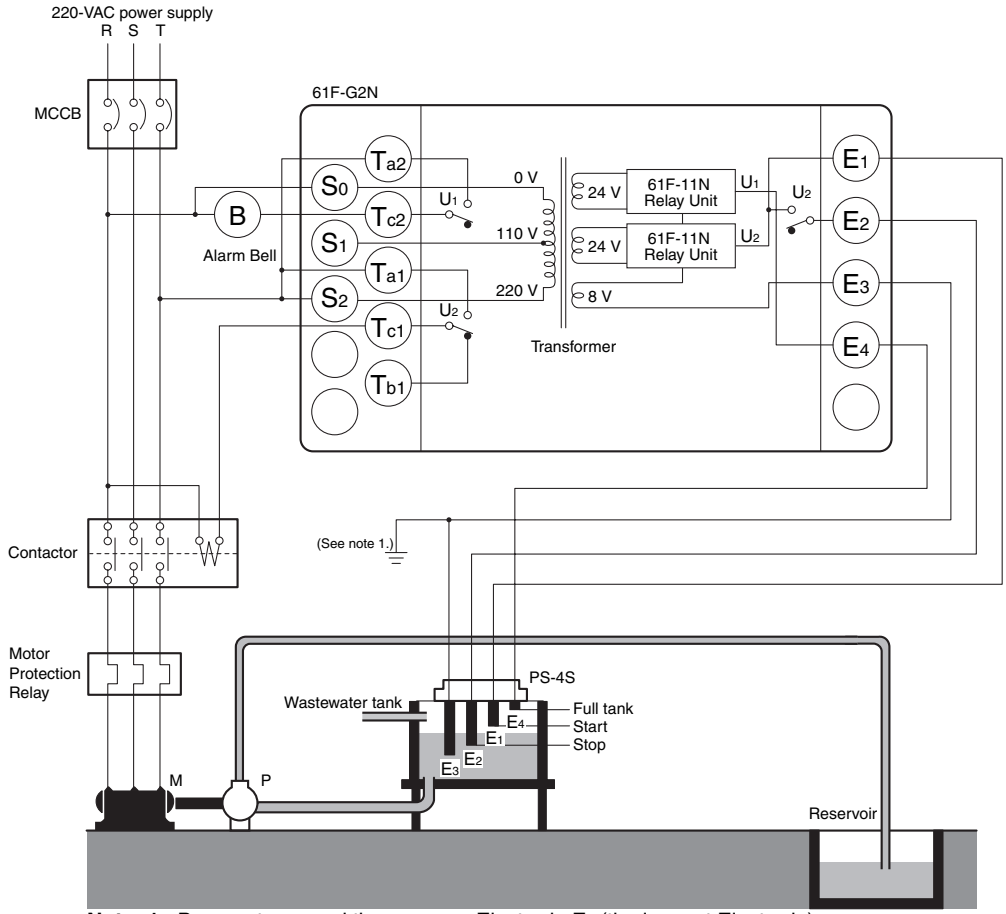
Compact Model
61F-G2N

Dimensions
page 16

Automatic Drainage Control with Abnormal Water Increase Alarm

Connections

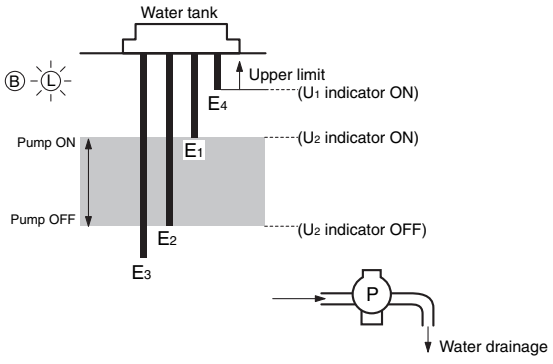
- Connect power supply S_2 to terminal Ta_1.
- Connect to power supply terminals.
  S_0-S_1: 110 VAC
  S_0-S_2: 220 VAC



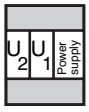
Note: 1. Be sure to ground the common Electrode E_5 (the longest Electrode).
2. The above wiring diagram is for a rated voltage of 110/220 VAC.

Principles of Operation

- The pump starts (U_2 indicator ON) when the water level reaches E_1 and stops (U_2 indicator OFF) when the water level drops below E_2.
- If the water level reaches E_4 for any reason, an alarm is given (U_1 indicator ON).

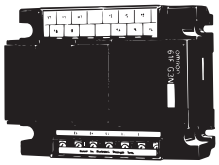


Relay Unit Layout



Automatic Water Supply Control with Full Tank and Water Shortage Alarm

Compact Model
61F-G3N

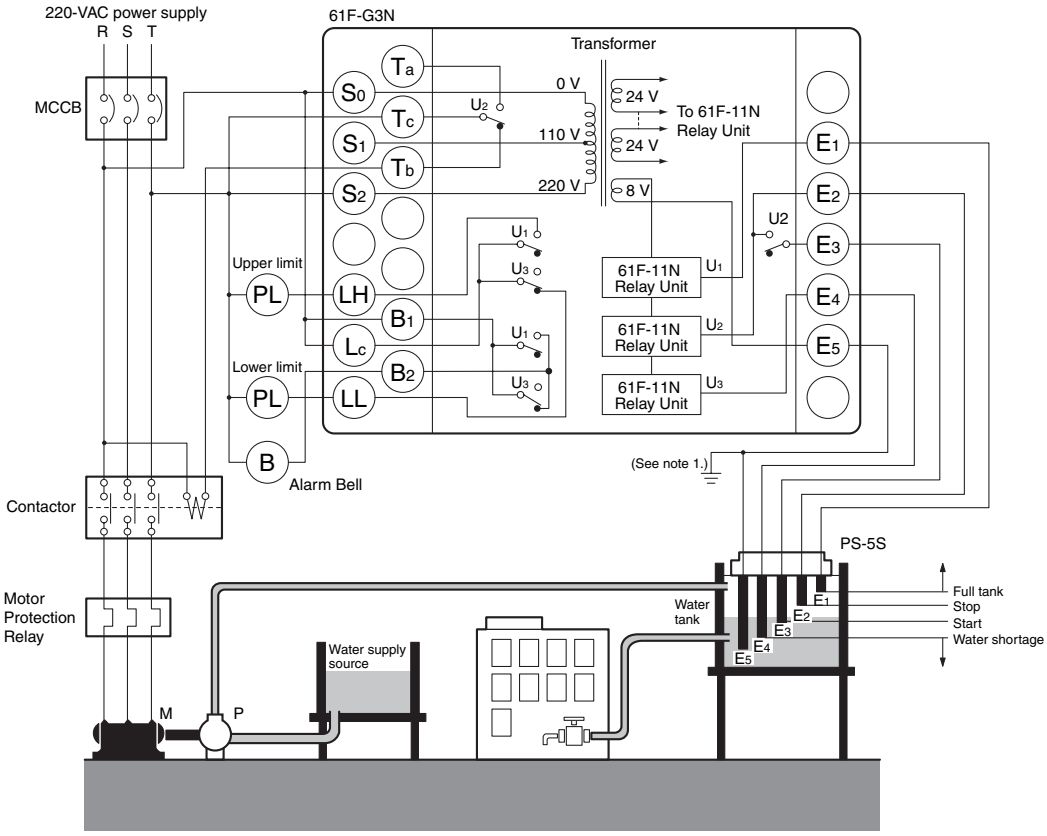


Dimensions
page 17

Automatic Water Supply Control with Full Tank and Water Shortage Alarm

Connections

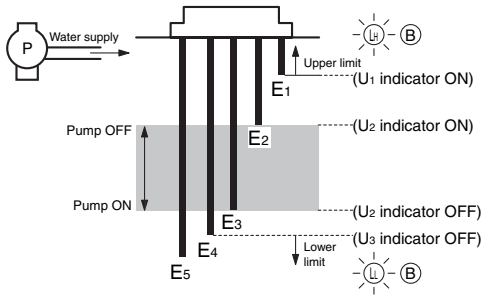
- Connect contactor coil terminal to Tb.
- Connect to power supply terminals.
  S_0-S_1: 110 VAC
  S_0-S_2: 220 VAC



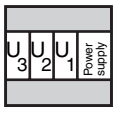
Note: 1. Be sure to ground the common Electrode E_5 (the longest Electrode).
2. The above wiring diagram is for a rated voltage of 110/220 VAC.

Principles of Operation

- The pump starts (U_2 indicator ON) when the water level reaches E_2 and stops (U_2 indicator OFF) when the water level drops below E_3.
- If the water level rises to E_1 for any reason, the upper-limit indicator turns ON and an alarm is given (U_1 indicator ON). If the water level drops below E_4 for any reason, the lower-limit indicator turns ON and an alarm is given (U_3 indicator OFF).

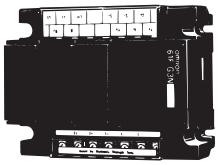


Relay Unit Layout



Automatic Drainage Control with Full Tank and Water Shortage Alarm

Compact Model
61F-G3N

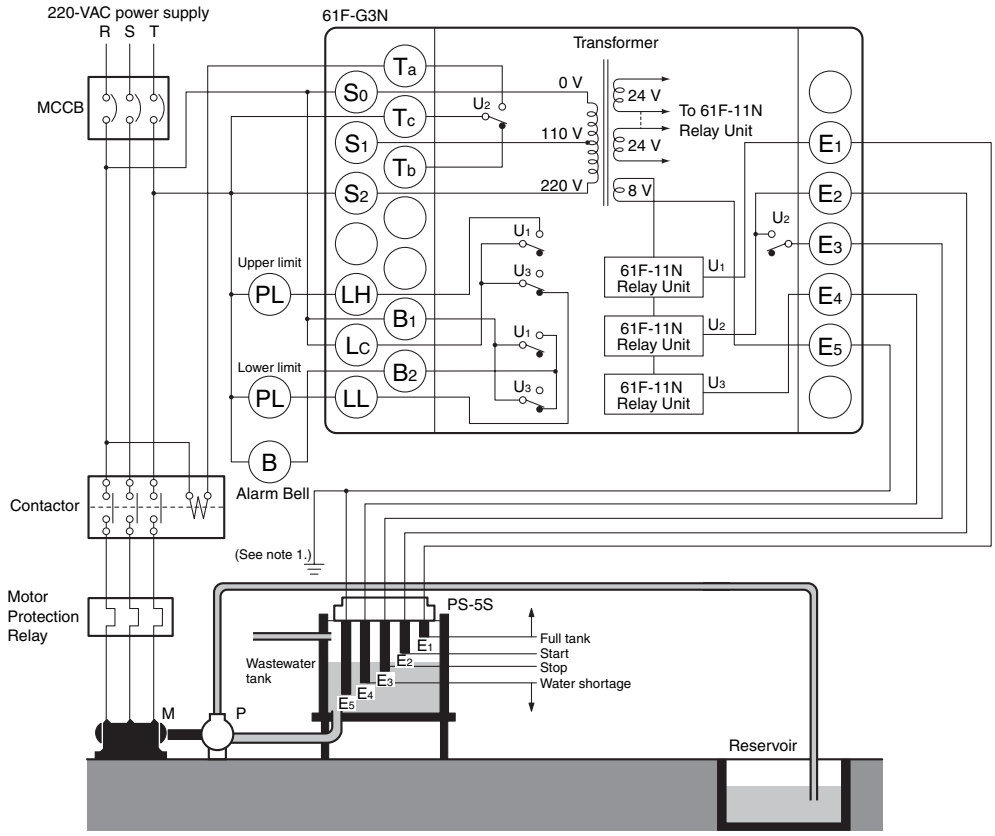


Dimensions
page 17

Automatic Drainage Control with Full Tank and Water Shortage Alarm

Connections

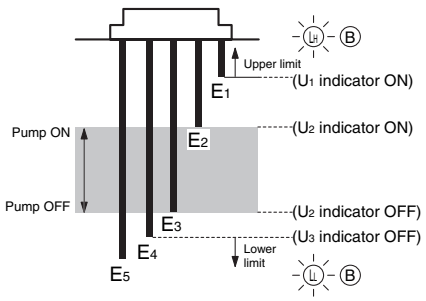
- Connect contactor coil terminal to Ta.
- Connect to power supply terminals.
  S_0-S_1: 110 VAC
  S_0-S_2: 220 VAC



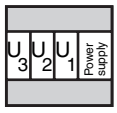
Note: 1. Be sure to ground the common Electrode E_5 (the longest Electrode).
2. The above wiring diagram is for a rated voltage of 110/220 VAC.

Principles of Operation

- The pump starts (U_2 indicator ON) when the water level reaches E_2 and stops (U_2 indicator OFF) when the water level reaches E_3.
- If the water level rises to E_1 for any reason, the upper-limit indicator turns ON and an alarm is given (U_1 indicator ON). If the water level drops below E_4 for any reason, the lower-limit indicator turns ON and an alarm is given (U_3 indicator OFF).

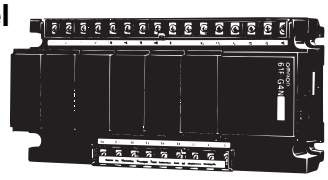


Relay Unit Layout



Water Source Level Indication with Prevention of Pump Idling Due to Water Shortage, and Automatic Water Supply Control with Indication of Water Level in Elevated Tank

Compact Model
61F-G4N



Dimensions
page 17

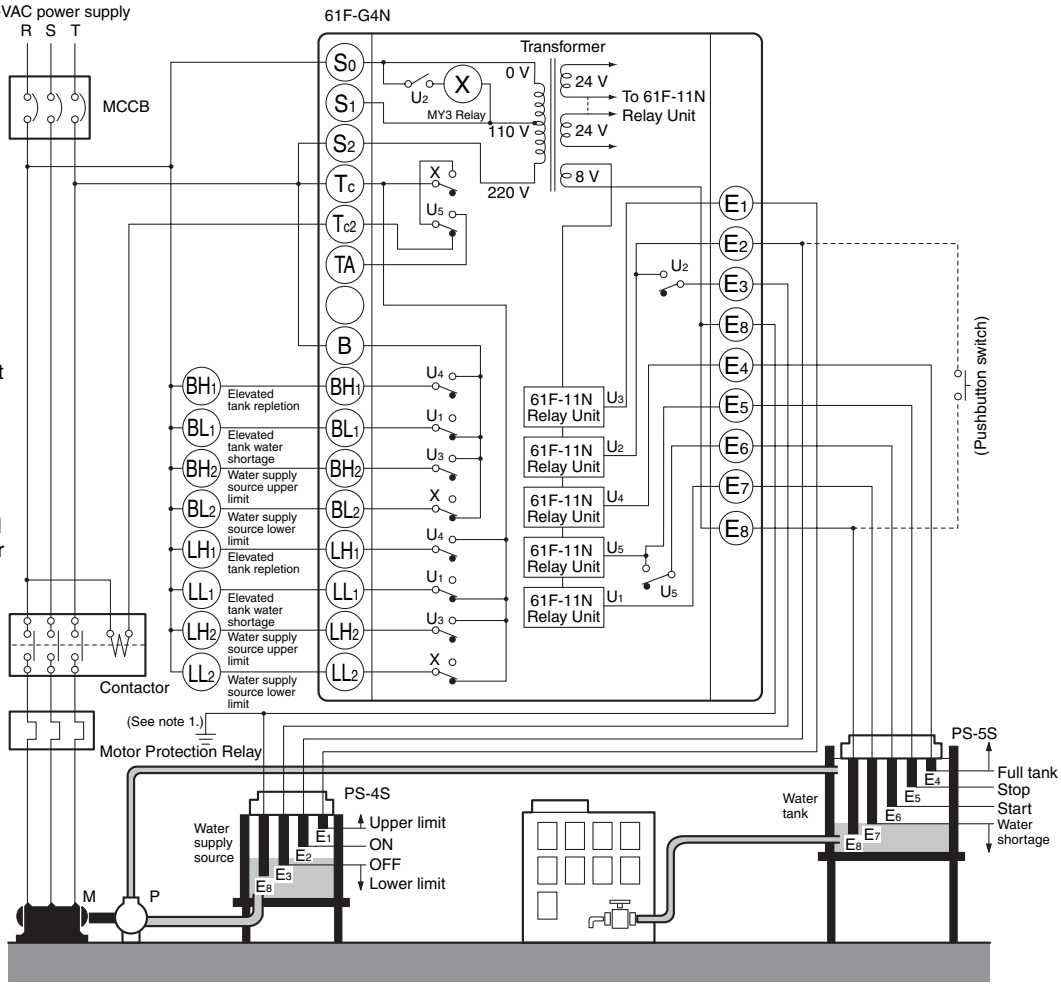
Water Source Level Indication with Prevention of Pump Idling Due to Water Shortage, and Automatic Water Supply Control with Indication of Water Level in Elevated Tank

Connections

- Connect to power supply terminals.
  S_0-S_1: 110 VAC
  S_0-S_2: 220 VAC
- Insert a pushbutton switch (NO contact) between E_2 and E_8 as shown by the dotted line.
- Do not press the pushbutton switch if the pump stops during normal operation after an alarm is given for low water level (i.e., the water level has not reached E_3).

Test Operation/ Recovering from Power Interruptions

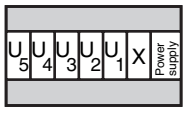
When starting the pump and after recovering from a power interruption, if the water source level has not yet reached E_2 (U_2 indicator OFF), press the pushbutton switch to start the pump by momentarily short-circuiting E_2 and E_8.



Note: 1. Be sure to ground the common Electrode E_8 (the longest Electrode).
2. The above wiring diagram is for a rated voltage of 110/220 VAC.

Principles of Operation

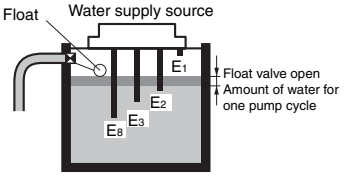
Relay Unit Layout



- Insert four Electrodes in the water supply source and five Electrodes in the elevated water tank.
- The lower-limit indicator for the water supply source remains ON while the water source level is below E_3 (U_2 indicator OFF).
- When the water level rises to E_2, the lower-limit indicator turns OFF (U_2 indicator ON) and the pump is ready for operation.
- When the water level reaches E_1, the upper-limit indicator turns ON (U_3 indicator ON).
- The water-shortage indicator for the elevated tank remains ON while the water level in the elevated tank is below E_7. The indicator turns OFF (U_1 indicator ON) when the water level rises to E_7.
- The pump stops (U_5 indicator ON) when the water level reaches E_5 and starts (U_5 indicator OFF) when the water level drops below E_6.
- If the water level reaches E_4 for any reason, the tank repletion indicator for the elevated tank turns ON (U_4 indicator ON).

Precaution

- Length of Electrode E_2
  When installing the Controller in locations where there is a possibility of momentary power interruptions or blackouts, the length of E_2 should be made so that the amount of water corresponding to one pump cycle does not expose the Electrodes. This will prevent the E_3 self-holding circuit from failing.



Liquid Level Indication and Alarm

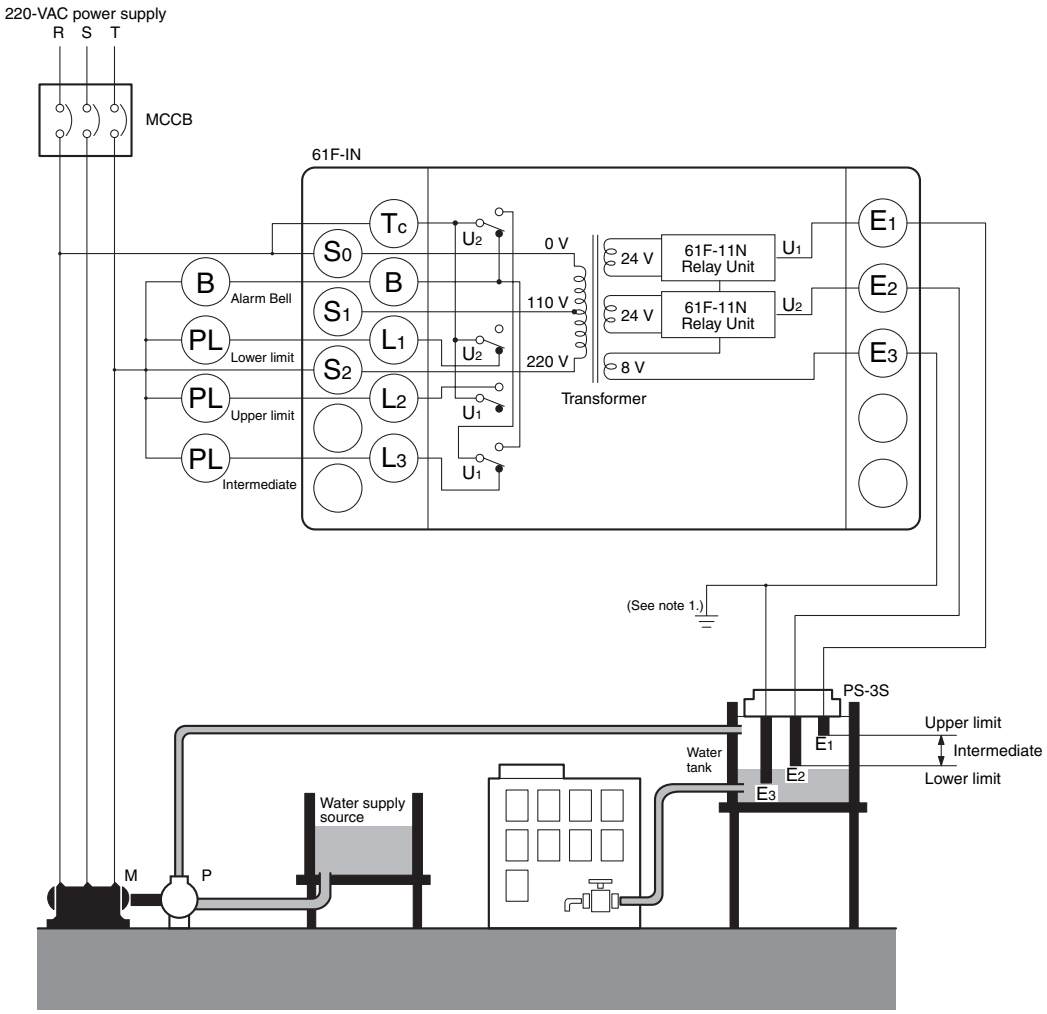
Compact Model
61F-IN

Dimensions
page 16

Liquid Level Indication and Alarm

Connections

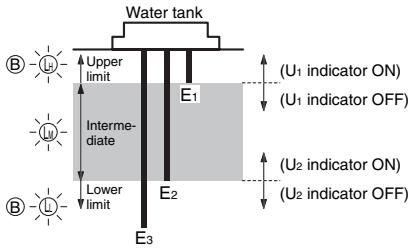
- Connect to power supply terminals.
  S_0-S_1: 110 VAC
  S_0-S_2: 220 VAC



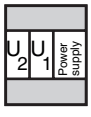
Note: 1. Be sure to ground the common Electrode E_3 (the longest Electrode).
2. The above wiring diagram is for a rated voltage of 110/220 VAC.

Principles of Operation

- When the water level drops below E_2, the lower-limit indicator turns ON and an alarm is given (U_2 indicator OFF).
- When the water level reaches E_2, the alarm turns OFF and the intermediate indicator turns ON (U_2 indicator ON).
- When the water level rises to E_1, the upper-limit indicator turns ON and an alarm is given (U_1 indicator ON).



Relay Unit Layout



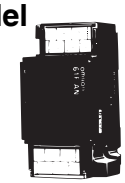
■ Two-wire Connection

The wiring between the 61F Controller and the Electrodes can be reduced by removing the self-hold circuit. This arrangement is called a two-wire connection. Three Electrodes are still required. Both the 61F Controller (including the Relay Unit) and Electrode Holder must be two-wire models.

Two-wire Electrode Holders have an in-built resistor of 6.8 kΩ 1W.

Automatic Water Supply and Drainage Control

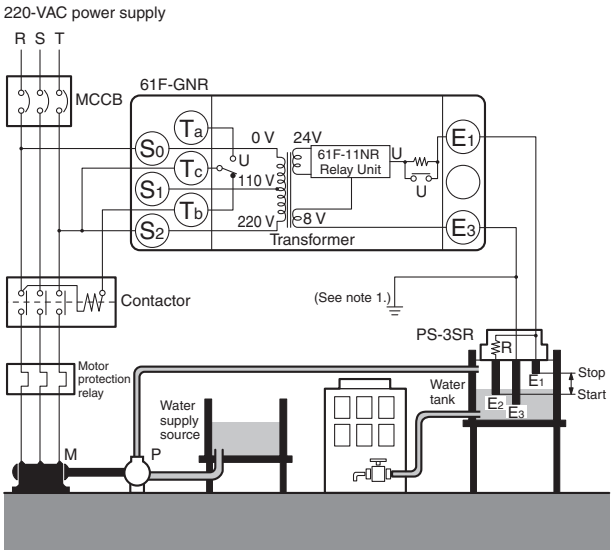
Compact Model
61F-GNR



Dimensions
page 16

Automatic Water Supply Control

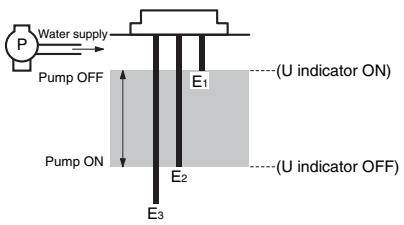
Connections



Note: 1. Be sure to ground the common Electrode E_3 (the longest Electrode).
2. The above wiring diagram is for a rated voltage of 110/220 VAC.

- Connect contactor coil terminal to Tb.
- Connect to power supply terminals.
  S_0-S_1: 100 VAC
  S_0-S_2: 200 VAC
- The two-wire models require only two cables for the connection between the 61F-GNR and the Electrode Holder, but still requires three Electrodes.
- A Two-wire Electrode Holder must be used. (It has an inbuilt resistance R.)
- The Relay Unit must also be for two-wire models.

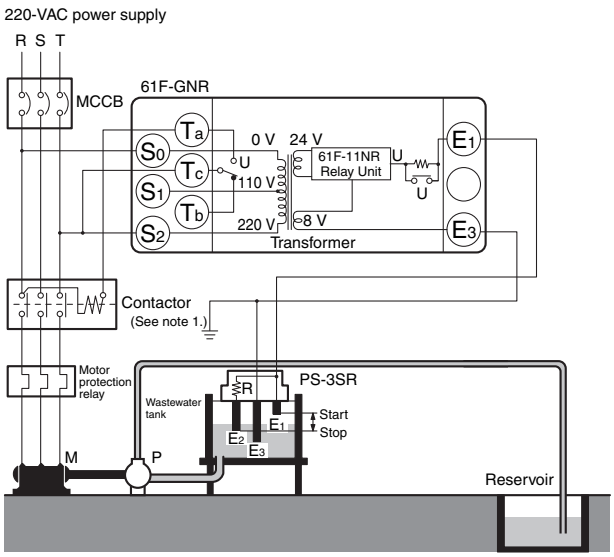
Principles of Operation



The pump stops (U indicator ON) when the water level reaches E_1 and starts (U indicator OFF) when water level drops below E_2.

Automatic Drainage Control

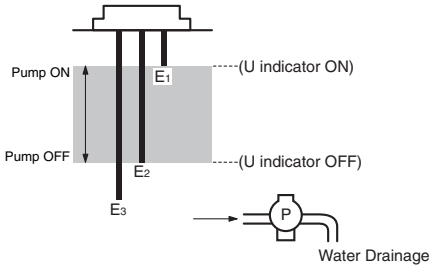
Connections



Note: 1. Be sure to ground the common Electrode E_3 (the longest Electrode).
2. The above wiring diagram is for a rated voltage of 110/220 VAC.

- Connect contactor coil terminal to Ta. (Do not connect Tb.)
- Connect to power supply terminals.
  S_0-S_1: 100 VAC
  S_0-S_2: 200 VAC
- The two-wire models require only two cables for the connection between 61F-GNR and the Electrode Holder, but still needs three Electrodes.
- A Two-wire Electrode Holder must be used. (It has an inbuilt resistance R.)
- The Relay Unit must also be for two-wire models.

Principles of Operation

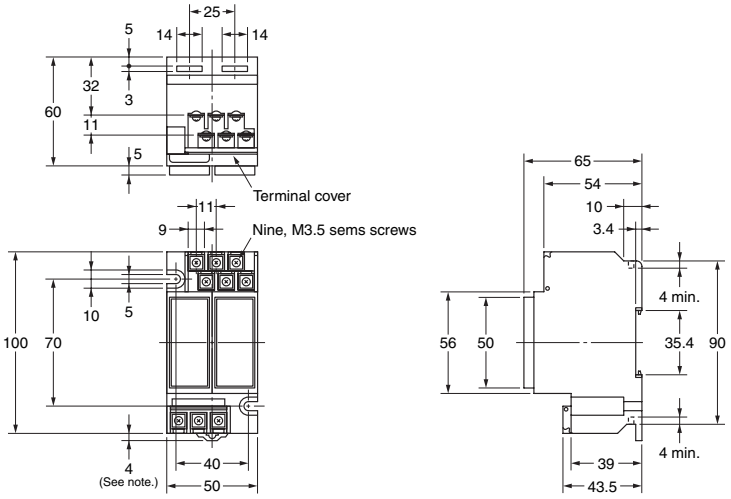


The pump starts (U indicator ON) when the water level reaches E_1 and stops (U indicator OFF) when the water level drops below E_2.

Dimensions

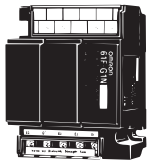
Note: All units are in millimeters unless otherwise indicated.

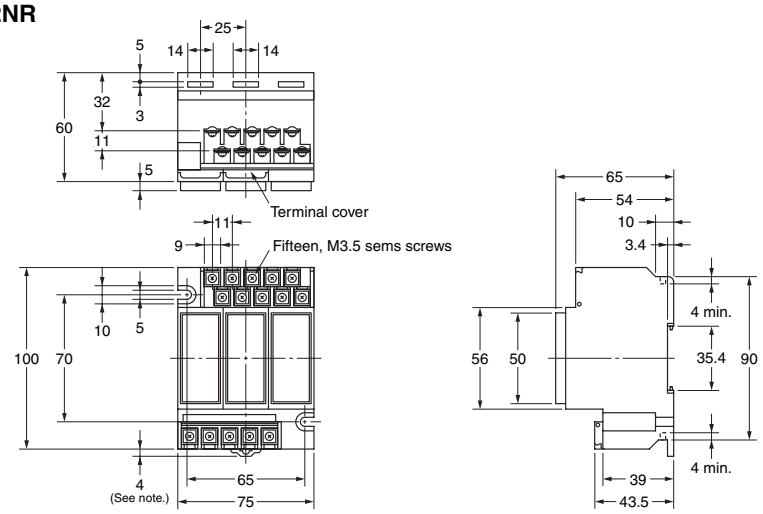
61F-GN, -GNL, -GNH, -GND, -GNR



Note: Dimensions are with the DIN rail mounting (sliding) bracket attached.

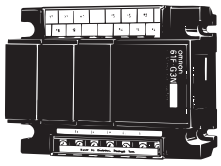
61F-G1N, -G1NL, -G1NH, -G1ND, -G1NR
61F-G2N, -G2NL, -G2NH, -G2ND, G2NR
61F-IN, - NL, -INH, -IND

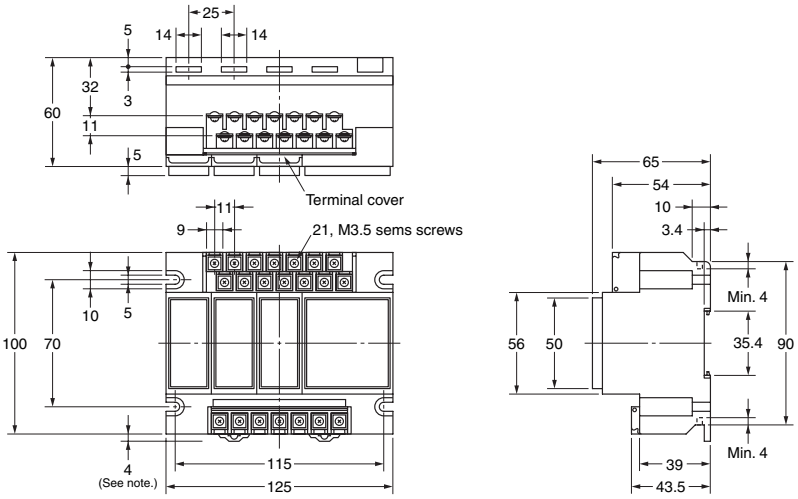




Note: Dimensions are with the DIN rail mounting (sliding) bracket attached.

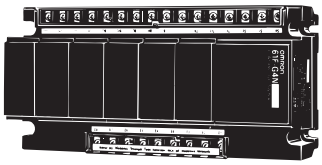
61F-G3N, -G3NL, -G3NH, -G3ND, -G3NR, -G3N-NGD

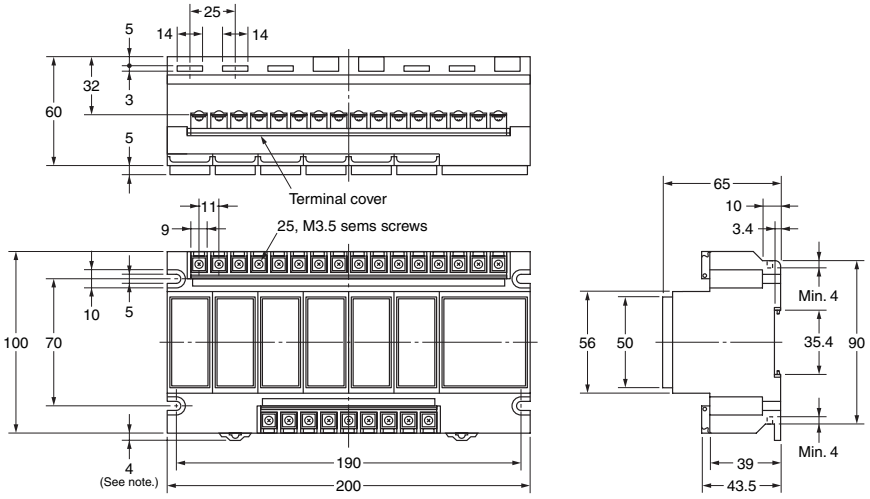




Note: Dimensions are with the DIN rail mounting (sliding) bracket attached.

61F-G4N, - G4NL, -G4NH, -G4ND, -G4NR, -G4N-KYD





Note: Dimensions are with the DIN rail mounting (sliding) bracket attached.

■ Safety Precautions

Refer to *Safety Precautions for All Level Controllers*.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

In the interest of product improvement, specifications are subject to change without notice.

Terms and Conditions Agreement

Read and understand this catalog.
Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

Warranties.
(a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.
(b) Limitations. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE
PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE.
Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) Buyer Remedy. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty.
See http://www.omron.com/global/ or contact your Omron representative for published information.

Limitation on Liability; Etc.
OMRON COMPANIES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY.
Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

Suitability of Use.
Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.
NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

Programmable Products.
Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

Performance Data.
Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.

Change in Specifications.
Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

Errors and Omissions.
Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.

2018.4

In the interest of product improvement, specifications are subject to change without notice.

OMRON Corporation
Industrial Automation Company

http://www.ia.omron.com/

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Omron:

61F-11 61F-11N 61F-11ND 61F-11NH 61F-11NL2K 61F-11NL4K 61F-11NR 61F-1P AC110 61F-1P-AC220 61F-G1 AC120/240 61F-G1H AC110/220 61F-G1H AC120/240V 61F-G1N-AC120/240 61F-G1ND AC110/120 61F-G1ND AC120/240 61F-G1NH AC120/240 61F-G1NL AC110/220 2KM 61F-G1NL AC120/240 2KM 61F-G1NL AC120/240 4KM 61F-G1NR AC110/220 61F-G1NR AC120/240 61F-G1P/AC100 61F-G1P AC110 61F-G1P-AC120 61F-G2-AC100/200 61F-G2 AC120/240 61F-G2H AC120/240 61F-G2N AC100/200 61F-G2N AC110/220 61F-G2N AC120/240 61F-G2ND AC110/220 61F-G2ND AC120/240 61F-G2NH AC110/220 61F-G2NH AC120/240 61F-G2NL AC110/220 2KM 61F-G2NL AC110/220 4KM 61F-G2NL AC120/240 2KM 61F-G2NL AC120/240 4KM 61F-G2NR AC110/220 61F-G2P AC100 61F-G2P AC120 61F-G2P-AC200 61F-G2PH AC100 61F-G3-AC110/220 61F-G3-AC120/240 61F-G3H AC100/200 61F-G3H AC110/220 61F-G3H AC120/240V 61F-G3N AC100/200 61F-G3N AC110/220 61F-G3N AC120/240 61F-G3ND AC110/220 61F-G3ND AC120/240 61F-G3NH AC110/220 61F-G3NH AC120/240 61F-G3NL AC110/220 2KM 61F-G3NL AC110/220 4KM 61F-G3NL AC120/240 2KM 61F-G3NL AC120/240 4KM 61F-G3NR AC110/220 61F-G3NR AC120/240 61F-G3T AC110/220 61F-G4 AC120/240 61F-G4H AC110/120 61F-G4H-AC120/240 61F-G4N AC110/220 61F-G4N AC120/240 61F-G4ND AC110/220 61F-G4ND AC120/240 61F-G4NH AC110/220 61F-G4NH AC120/240 61F-G4NL AC110/220 2KM 61F-G4NL AC110/220 4KM 61F-G4NL AC120/240 2KM 61F-G4NL AC120/240 4KM 61F-G4NR AC110/220 61F-G4NR AC120/240 61F-G AC100/200 61F-G AC110/220 61F-G AC120/240 61F-GD AC110/220 61F-GL AC100/200 2KM 61F-GL AC100/200 4KM 61F-GN AC110/220 61F-GN AC120/240 61F-GND AC110/220 61F-GND AC120/240 61F-GNH AC120/240 61F-GNL AC110/220 2KM 61F-GNL AC110/220 4KM 61F-GNL AC120/240 2KM 61F-GNL AC120/240 4KM 61F-GNR AC120/240 61F-GP-N2 220VAC 61F-GP-N2 240 61F-GP-N2 24VAC 61F-GP-N8 AC100 61F-GP-N8 AC120 61F-GP-N8 AC200 61F-GP-N8 AC24