

AUTOMATIC RECIPROCATING CONTROLLER
Model No. : GALLAUTO-06

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AUTOMATIC RECIPROCATING CONTROLLER Model No. : GALLAUTO-06

INTRODUCTION :

The GALANT make Automatic Reciprocating Controller has been designed to operate the equipments used for Powder Coating Painting purpose in modern Industries.

The Controller is front panell mounting type and hazard free in operation. It is designed in three no. of basic cards, namely 'Main Card', 'ADC Output Card' and 'Display Card'.

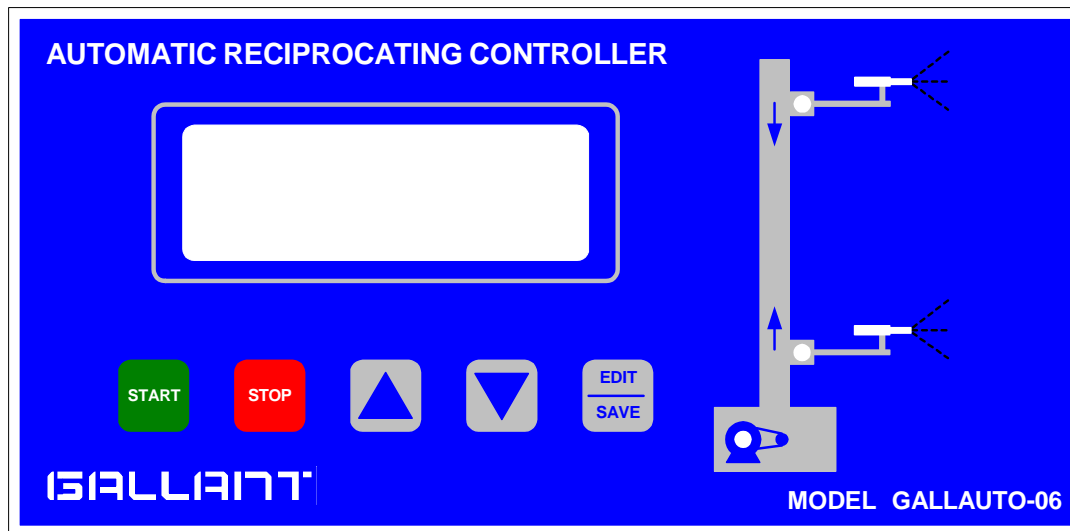
The micro controller based controller is having a two line back lit LCD Display and five touch keys for programming and control indication along with LEDs as describe bellow.

- 1) START KEY
- 2) EDIT / SAVE KEY
- 3) UP KEY
- 4) DOWN KEY
- 5) STOP KEY

One table of 20 sets of user changeable program can be programmed where user can assignee the distance and speed of the gun. The Controller is intending to control the distance traveled by the gun and the speed.

The Controller takes pulse inputs from customized encoder (one pulse for two cm), which is fitted to driving sprocket. The pulse received by controller is counted and converted to the distance traveled by the gun.

One analog output is also generated by the controller to provide the speed control signal for AC Drive.



OPERATION:

There are two modes of operation, one is "EDIT" (Supervisory Mode) and another is "RUN" mode, where user can run the program from the exisisting table.

EDIT / Table Program Mode:

First select the desired table from 1 to 20 by pressing “UP” key only. Then press the “EDIT” button, display will show the table as bellow.

PROX: COUNT = XXXX A-M O/P VG = X.XXV
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Press “UP / Down” key to set the desire value for count. Then press “EDIT” key once to enter the value and then automatically it will go to output voltage (O/P VG) setting for speed in second line.

Then set desired voltage by pressing “UP / Down” key to set the desire value for count. Then press “EDIT” key once to complete the programming. Then “SUCCESS” display will flash twice.

SUCCESS

Than display will come to normal mode as bellow.

PRO1: COUNT = XXXX O/P VG = X.XXV
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Repeat the same procedure for programming another tables.

RUN Mode:

To run the desired program select the table required to run by pressing “UP” key only, then press “RUN” key. The controller will run selected program.

At any point of time press the “STOP” key to stop the controller function.

SAFETY MEASURES :

Enclosure IP55.

Main Supply Card is fuse protected.

FAULT Finding:

- 1) No Power : Check the 24V DC supply
 - 2) No count : Check the 24V DC supply to Encoder and check pulse input at controller terminal
 - 3) Starting point error : Check Proximity input supply and output pulse for Gun Initialisation.
 - 4) Speed control error : Check analog output from controller.
 - 5) Forward/Reverse error : Check the forward and reverse Relay output
 - 6) Gun output error : Check the Gun output Relay
 - 7) **For other Faults : Consult Factory**
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