OP619-V01

1. PRODUCT PROFILE

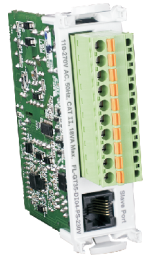


Figure 1.1 :
FL-GT35-DI04-PS-230V

Figure 1.1 :
FL-GT35-DI04-PS-24V

2. DESCRIPTION

- FL-GT35-D**I**04-PS-230V/ FL-GT35-D**I**04-PS-24V as shown in Figure 1.1 and Figure1.2 are used as a plug-in module in Flexys GT35 and not as an independent module.
- 4-Digital Inputs (can function as Fast Inputs)
- Sensor Supply in FL-GT35-D**I**04-PS-230V

3. ELECTRICAL SPECIFICATIONS

Parameter	FL-GT35-DI04-PS-230V	FL-GT35-DI04-PS-24V
Supply Voltage	230V AC (90 ~ 270V AC)	24V DC (±10% V DC)
Sensor Supply (SS)	10V (100 mA)	NA
Power Consumption	18 VA	8 W
Reverse polarity protection	NA	Yes
Voltage interruption	Up to 10 ms	
Operating Temperature	0 to 55°C	
Storage Temperature	-20 to 70°C	
Humidity	95%	
Connector	Spring type pluggable terminal block (5.08 mm pitch)	
Weight (g)	90	80

NOTE : FL-GT35-D**I**04-PS-230**V** card limitations 1) Maximum 1 FL-SC-RO08 cards
2) Maximum 1 FL-SC-AO04-X card
3) Not supported FL-SC-AO04-X if FL-SC-RO08 used and vice-versa.
4) Maximum 2 FL-SC-DI04-RO04 cards.

Where X = V/I

COMPLIANCE WITH STANDARD

EMC/EMI compliance	IEC61131-2, Clause 8
Safety compliance	IEC61131-2, Clause 11
Immunity Zone	Zone A
Power supply FL-GT35-DI04-PS-24V	PS2, Safety Extra Low Voltage Circuit

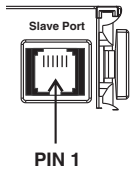
DIGITAL INPUTS

*1 = 90⁰ Phase shift signals

Number of Digital Input		4 (Including 4 Fast Inputs)				
Input Type		DC, PNP				
Operating Modes (user configurable)		Unidirectional / Bidirectional / Quadrature / Dual Unidirectional / None				
Channel	**DI**	**MODE**				
		UNI	BI	QUAD	DUAL UNI	None
FC0	I0	Rate Totalizer	Rate Totalizer	1st input*1	Rate Totalizer	Digital Input
	I1	Digital Input	Direction	2nd input*1	Totalizer	Digital Input
FC1	I2	Rate Totalizer	Rate Totalizer	1st input*1	Rate Totalizer	Digital Input
	I3	Digital Input	Direction	2nd input*1	Totalizer	Digital Input
Operating Range		6 ~ 30V DC (V+)				
Input current		8mA Max				
Action Level	ON ➡ OFF	<2V DC				
	OFF ➡ ON	≥6V DC				
Response Time		Digital Input mode : typical 1 ms (based on ladder scan time)				
		Fast Input mode : 100µsec				
Input Impedance		3.3 kΩ				
Debounce Time		0 ~ 255ms (Default = 10ms)				
Maximum Frequency (Fast inputs)		5 kHz				
Isolation		2.2 kV (CPU and Inputs)				
Protection against polarity inversion		Yes				
Existence of common points between channels		SS- / GND				
Effect of incorrect input terminal or withdrawing / inserting input module under power		Unstable responses or input / product damage				

4. INTERNAL PIN OUT DESCRIPTION FOR 6 PIN JACK (PORT 1)

	DESCRIPTION
1	RS485 Slave +ve
2	———
3	———
4	———
5	———
6	RS485 Slave –ve



5. TYPICAL WIRING DIAGRAM

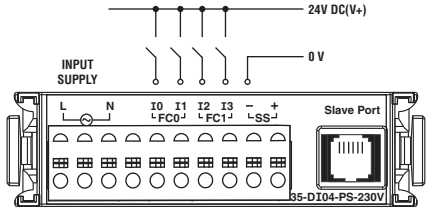


Figure 5.1 : Digital inputs via external 24V supply

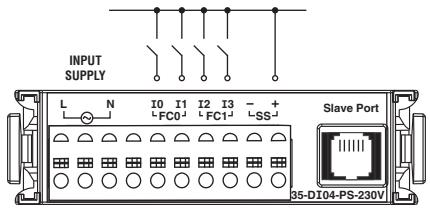


Figure 5.2 : Digital Inputs using internal 10V power supply

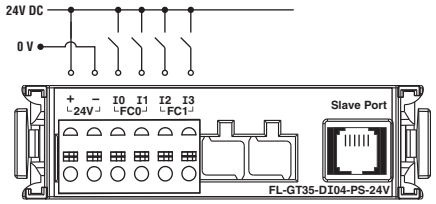


Figure 5.3 : FL-GT35-DI04-PS-24V wiring diagram

6. SAFETY SUMMARY

- To prevent risk of electric shock, power supply to the controller must be kept off while wiring.
- Wiring shall be done strictly according to the terminal layout provided in the operating manual.
- When operating FL-GT35-DI04-PS-24V, ensure that power at its terminal is +24V and GND (power range is 21.6V DC ~ 26.4V DC).
  When voltage is less than 18V DC, Controller will stop operating and all on board outputs will turn OFF.

7. ORDER CODE INFORMATION

ORDER CODE	DESCRIPTION
FL-GT35-DI04-PS-230V	230V AC Power Supply
FL-GT35-DI04-PS-24V	24V DC Power Supply

DISCLAIMER LIABILITY

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However the information in this publication is reviewed and any necessary corrections are included in subsequent editions.

? SERVICE DETAILS

This device contains no user serviceable parts and requires special equipment and specialized engineers for repair.

Please contact service center for repair on the following numbers :

Tel. No. : + 91-7498077172 ; **Email :** service@selec.com

NO WARRANTY ON UNIT DAMAGED DUE TO WRONG POWER SUPPLY.

(Specifications are subject to change, since development is a continuous process.)

Selec Controls Pvt. Ltd., India

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Tel. No. : +91-22-41 418 419/430 I Fax No. : +91-22-28471733 I Toll free : 1800 227 353(BSNL/MTNL Subscribers only)
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