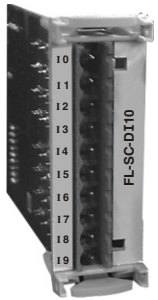
selec

DIGITAL INPUT CARD

Operating Instructions

OP389-V01

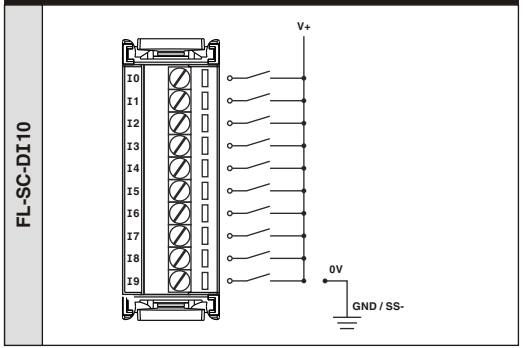


This is Digital input card for Flexys Rail and Flexys Panel TX4. It can be easily connected as well as replaced in Flexys Rail and Flexys Panel TX4.

SPECIFICATIONS

No. of Inputs per card	10 Nos
Input type	PNP
Input Voltage Range (V+)	7 - 30V DC
Input Current	5.5mA @ 24V 7.5mA @ 30V
Maximum Counting Frequency	Standard DI Mode - 50Hz
Response Time	10ms (Selectable through software via debounce parameter)
Isolation between 230V Power Supply and Inputs	Yes
Protection against polarity Inversions	Yes

TYPICAL WIRING DIAGRAM



SAFETY PRECAUTIONS

This manual is meant for personnel involved in wiring, installation, operation and routine maintenance of the equipment.

All safety related conditions, symbols and instructions that appear in this operating manual or on the equipment must be strictly followed to ensure operator and instrument safety. Any misuse may impair the protection provided by the equipment.

CAUTION : Read complete instructions prior to installation and operation of the unit.

INSTALLATION INSTRUCTIONS

CAUTION

1. This equipment can be easily fitted or removed from the controller with respect to any slots of the main controller
2. Conductors must not come in contact with the internal circuitry of the equipment else it may lead to a safety hazard that may endanger life or cause electrical shock to the operator.
3. The equipment shall not be installed in environmental conditions other than those specified in this manual.
4. Since this equipment forms part of the main control panel, its output terminals get connected to the host equipment. Such equipment shall also comply to EMI/EMC and safety requirements like BSEN 613261 and BSEN 61010.
5. Thermal dissipation of equipment is met through ventilation holes provided on housing of equipment. Obstruction of these ventilation holes may lead to a safety hazard.
6. The output terminal shall be connected strictly as per the specified terminal diagram of individuals I/O cards.

FUNCTIONAL DETAILS

User can configure IO cards using SELPRO software.

SELPRO has two sections :

1. Ladder logic programming section
2. Selec Machine Interface, used for configuration of HMI.

This software is provided with the product. For details of the software and configuration method, please refer to its user manual with the product.

ORDERING INFORMATION

Order Code	Description	Certification	
		CE	cULus LISTED
FL-SC-DI10-CE	Digital input	■	—

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 :
Toll free : 1800 227 353 (BSNL / MTNL subscribers only)
Others : 91-22-40394200 / 40394202

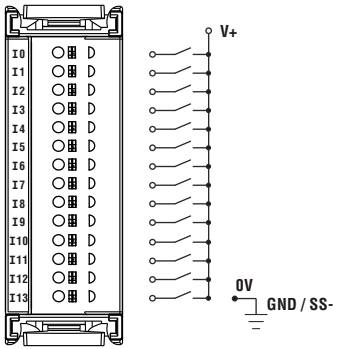
NO WARRANTY ON UNIT DAMAGED DUE TO WRONG POWER SUPPLY.

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

Selec Controls Pvt. Ltd.

Tel. No. : +91-22-40394200 / 40394202
Fax No. : +91-22-28471733 I Toll free : 1800 227 353
Website: www.selec.com I Email: sales@selec.com

4. TYPICAL WIRING DIAGRAM



5. 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.

NOTE : For Safety precautions, Refer FL-TX4-LG-X-X-X / FL-RL-BS-6 / Flexys GT35 / EXP FLEX 2M Operating Instruction.

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

Factory Address :
EL-27/1, Electronic Zone, TTC Industrial Area, MIDC, Mahape, Navi Mumbai - 400 710, INDIA.
Tel. No. : +91-22-41 418 419/430 I Fax No. : +91-22-28471733 I Toll free : 1800 227 353(BSNL/MTNL Subscribers only)
Website : www.selec.com I Email : sales@selec.com

1. PRODUCT PROFILE

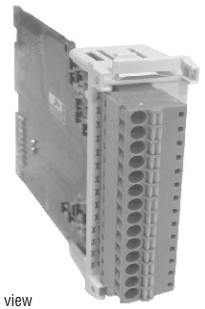


Figure 1.1 : Front view

2. DESCRIPTION

- FL-SC-DI14 card as shown in Figure 1.1 is used as a plug-in module in Flexys series and EXP FLEX 2M, and not as an independent module.
- Easy to connect and replace.

NOTE : For installation procedure, Refer FL-TX4-LG-X-X-X / FL-RL-BS-6 / Flexys GT35 / EXP FLEX 2M Operating Instruction.

3. ELECTRICAL SPECIFICATIONS

Number of Digital Inputs		14
Input Type		DC, PNP
Operating Range		6 ~ 30V DC (V+)
Input Current		8mA max. per input
Action Level	ON ➡ OFF	< 2V DC
	OFF ➡ ON	≥ 6V DC
Response Time		Default 10ms (based on ladder scan time)
Input Impedance		3.3 kΩ
Debounce Time		0 ~ 255 ms (Default = 10 ms)
Maximum counting frequency		40 Hz (with < 6ms debounce time)
Isolation		2.5 kV (between CPU and Inputs)
Protection against polarity inversion		Yes
Existence of common points between channels		For 230V supply : SS- For 24V supply : GND/0V
Effect of incorrect input terminal OR Withdrawing / inserting input module under power		Unstable responses OR input / product damage
Monitoring point and binary state of visual indicator		Available
Operating Temperature		0 to 55°C
Storage Temperature		-20 to 70°C
Humidity		95%
Connector		Spring type pluggable terminal block (3.5 mm pitch)
Weight (g)		40