

FlexiLogics®-FL005

Low Cost High Performance PLC



FL005 (Slim Case Series)

Features

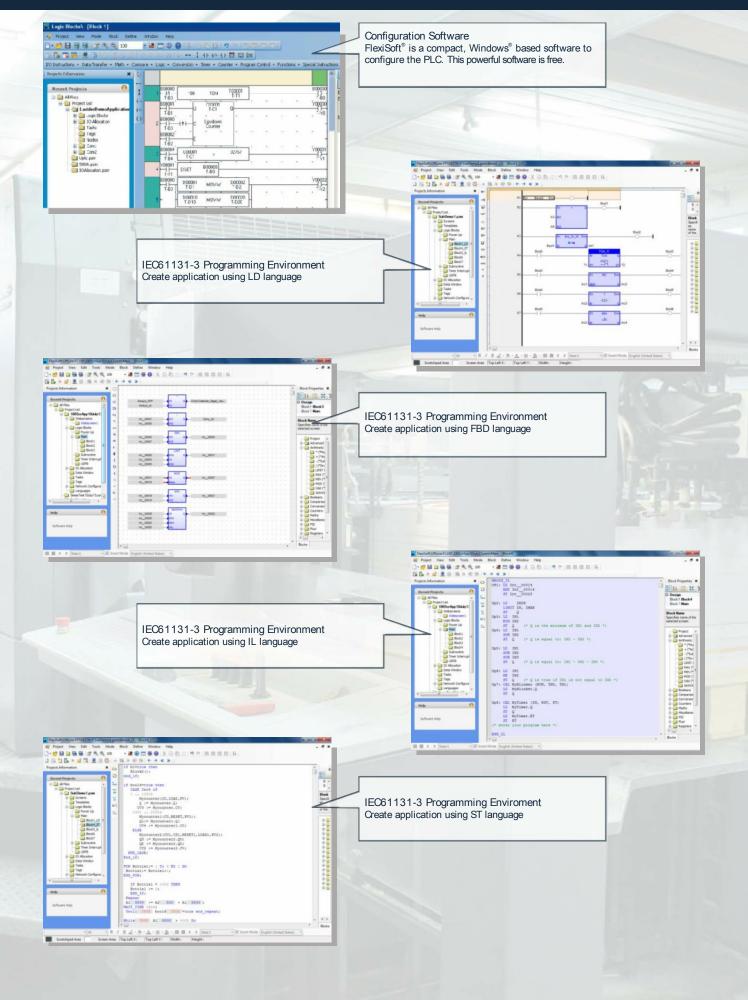
- DIN rail / Back panel mounted slim PLC
- Transistor or Relay outputs
- 32 Bit RISC processor
- Built-in RTC
- DC inputs, DC Outputs
- Analog Inputs (Voltage, Current)
- Analog Output (Current)
- Support for High Speed Counters / Quadrature
 (up to 200 KHz) and Timers

- High Speed PWM output (100 KHz)
- Up to 2 Serial Ports. Support for various PLC protocols
- 1 USB Device Port
- DC powered units (24 V DC)
- Simple Ladder programming using Windows® based software
- Support for LD, FBD, ST, SFC, IL type IEC61131-3 programming languages
- CE, UL Class1 Div2 approved
- FREE programming software

Model Comparison

Model		FL005-0604P	FL005-0604N	FL005-0808P	FL005-0808N	FL005-0808RP	FL005-0808P0201L	FL005-0808N0201L	FL005-0808RP0201L
Power Supply	Rated Power	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC
Зирріу	Isolation	1 KV	1 KV	1 KV	1 KV	1 KV	1 KV	1 KV	1 KV
	Input Signal	DC Input Bi-directional	DC Input Bi-directional	DC Input Bi-directional	DC Input Bi-directional	DC Input Bi-directional	DC Input Bi-directional	DC Input Bi-directional	DC Input Bi-directional
	Total Channels	6	6	8	8	8	8	8	8
Digital	High Speed Channels	4	4	4	4	4	4	4	4
Inputs	Isolation	1 KV	1 KV	1 KV	1 KV	1 KV	1 KV	1 KV	1 KV
	High Speed Inputs	2	2	2	2	2	2	2	2
	Quadrature Inputs	2	2	2	2	2	2	2	2
	Max. HSC frequency	200 KHZ	200 KHZ	200 KHZ	200 KHZ	200 KHZ	200 KHZ	200 KHZ	200 KHZ
	Total Channels	5	5	8	8	8	8	8	8
	Output Type	PNP	NPN	PNP	NPN	6 Relay, 2 PNP	PNP	NPN	6 Relay, 2 PNP
	Isolation	1 KV	1 KV	1 KV	1 KV	1 KV	1 KV	1 KV	1 KV
	Maximum Relay contact current	-	-	-	-	2 A at 24 VDC	-	-	2 A at 24 VDC
Digital						2 A at 230 VAC 5 A/common			2 A at 230 VAC 5 A/common
Outputs	High Speed Outputs	1	1	2	2	2	2	2	2
	Max pulse output frequency	100	100	100 KHZ	100 KHZ	100 KHZ each	100 KHZ	100 KHZ	100 KHZ each
	Maximum transistor	0.25 A at 24	0.3 A at 24	0.25 A at 24	0.3 A at 24	0.25 A at 24	0.25 A at 24 VDC	0.3 A at 24	0.25 A at 24
	output current	VDC	VDC	VDC	VDC	VDC			
	Channels	-	-	-	-	-	2	2	2
Analog	Resolution	-	-	-	-	-	16-bit	16-bit	16-bit
Inputs	mA						0 to 20 mA, 4 to 20 mA	0 to 20 mA, 4 to 20 mA	0 to 20 mA, 4 to 20 mA
	V	-	-	-	-	-	0 to 10 VDC, 0 to 5 VDC	0 to 10 VDC, 0 to 5 VDC	0 to 10 VDC, 0 to 5 VDC
	Channels	-	-	-	-	-	1	1	1
Analog Output	Resolution	-	-	-	-	-	12-bit	12-bit	12-bit
	mA	-	-	-	-	-	4 to 20 mA	4 to 20 mA	4 to 20 mA
Comm. Ports	Serial	1	1	2	2	2	2	2	2
	Туре	-	-	one 3.81 pitch PBT RS 485 (2-wire)					
		One RJ45 RS232	one RJ45 RS232	one RJ45 RS232	one RJ45 RS232	one RJ45 RS232	one RJ45 RS232	one RJ45 RS232	one RJ45 RS232
	USB	1	1	1	1	1	1	1	1
	Туре	USB Micro (Device)	USB Micro (Device)	USB Micro (Device)	USB Micro (Device)	USB Micro (Device)	USB Micro (Device)	USB Micro (Device)	USB Micro (Device)
Expansion Connectivity		NA	NA	NA	NA	NA	NA	NA	NA
RTC		No	No	Yes	Yes	Yes	Yes	Yes	Yes
Dimensions		Fig. A	Fig. A	Fig. A	Fig. A	Fig. A	Fig. A	Fig. A	Fig. A
Certification		CE & UL Class1 Div 2	CE & UL Class1 Div 2	CE & UL Class1 Div 2	CE & UL Class1 Div 2	CE & UL Class1 Div 2	CE & UL Class1 Div 2	CE & UL Class1 Div 2	CE & UL Class1 Div 2

Software Features



General Specifications

Functional		
Program Capacity	33 K Steps	
Total Program Memory	288 KB (Application + Ladder)	
Execution Speed	60.0 ns/contact	
	240.01 ns/coil	
	373.35 ns/16 bit transfer	
	366.68 ns/16 bit signed addition	
Clock-Calendar	Year, month, day, hour, minute, second, & Day of the week	

Environmental	vironmental		
Temperature	0 to 60° C (operating), -20 to 85° C (storage)		
Humidity	10 to 90 % non condensing		
Vibration immunity	IEC60068-2-6		
Shock immunity	IEC60068-2-27		
Dimensions (mm)	100 mm(H) X26 mm(W) X70 mm(D)		
Weight (Approx.)	150 g		
Isolation	Isolation between communication ports, power and I/O is 500 V DC for 1 Min.		

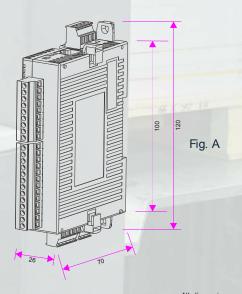
EMI/EMC	
Immunity to ESD	as per IEC61000-4-2
Immunity to Fast Transients	as per IEC61000-4-4
Immunity to Radiated electromagnetic field	as per IEC61000-4-3
Immunity to	
Conducted disturbances	as per IEC61000-4-6
Surge	as per IEC61000-4-5
Radiated emission	as per EN55011

Protocols Supported

Driver	FL005
ABB PLCs	✓
Allen Bradley DF1	✓
Aromat FP Series	✓
Baldor	✓
Danfoss Drive	✓
Delta PLCs	✓
GE SNP	✓
GE SNP- X	✓
Idec PLCs	✓
LG Master K Series PLC	✓
LG Master K 300S	✓
Mitsubishi FX	✓
Mitsubishi Q Series PLCs (Serial)	✓

Driver	FL005
Modbus ASCII (Unit as Master)	✓
Modbus RTU (Unit as Master)	✓
Modbus RTU (Unit as Slave)	✓
Serial monitor	✓
Serial Printer	✓
Toshiba (Link Port) Series PLCs	✓
Toshiba Inverters PLCs	✓
Toshiba T Series	✓
TriPLC	✓
Twido PLCs	✓
Unitelway PLCs	✓
Universal Serial Driver(ASCII)	✓

Dimensions



Please contact factory for more information. We welcome an opportunity to develop new, custom drivers and customized units.

All dimensions are in mm.



HEAD OFFICE

Survey No. 2/6, Baner Road, Pune - 411045, India. Tel: + 91 20 2729 2840 Fax: + 91 20 2729 2839

Email: info@renuelectronics.com Website: www.renuelectronics.com

An ISO 9001: 2008 and ISO 14001: 2004 certified company