ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

**Artisan Technology Group**
(217) 352-9330 | sales@artisantg.com | artisantg.com

**Full-service, independent repair center**
with experienced engineers and technicians on staff.

**We buy your excess, underutilized, and idle equipment**
along with credit for buybacks and trade-ins.

**Custom engineering**
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

**Expert team | Trust guarantee | 100% satisfaction**

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *IDEC FT1A-H40RSA* at our website: ***Click HERE***

New Generation PLC

# FT1A Series SmartAXIS - 40 I/O

## Key Features



- Available in 100-240 VAC and 24 VDC power
- Available with/without embedded LCD
- 10 Amp Relay contacts
- USB Mini-B Programming Port
- Embedded 6-pt analog inputs (0-10VDC, 10-bit, DC power)
- Integrated 4 x 100KHz high-speed counter
- Embedded Ethernet port
- Supports Modbus TCP and RTU
- SD Memory card for data logging and program storage
- Optional RS232C/RS485 adapter
- 100KHz high-speed outputs

## General Specifications

| Part Numbers | FT1A-H40RKA, H40RSA | FT1A-B40RKA, B40RSA | FT1A-H40RC | FT1A-B40RC |
|---|---|---|---|---|
| Appearance |  |  |  |  |
| LCD Screen | Yes | N/A | Yes | N/A |
| Operating Temperature | 0 to +55°C (operating ambient temperature) | | | |
| Storage Temperature | –25 to +70°C (no freezing) | | | |
| Rated Power Voltage | 24V DC | | 100 to 240V AC | |
| Allowable Voltage Range | 20.4 to 28.8V DC (Including ripple voltage) | | 85 to 264V AC | |
| Rated Power Frequency | – | | 50/60Hz (47 to 63Hz) | |
| Maximum Power Consumption | 7.9W | | 48VA | |
| Weight | Approx. 420g | | Approx. 580g | |

## Function Specifications

| Part Numbers | | FT1A-H40RKA, H40RSA, B40RKA, B40RSA | FT1A-H40RC, B40RC |
|---|---|---|---|
| Program Capacity Note 1 | | 47,400 bytes (11,850 steps) | |
| Input | Points | 24 | |
| | Digital Input (Terminal No.) | 18 (I0 to I7, I10 to I17, I20, I21) | 24 (I0 to I7, I10 to I17, I20 to I27) |
| | Shared Analog Input (Terminal No.) | 6 (I22 to I27) | – |
| | Output Points | 16 | |
| | 10A Relay Output (Terminal No.) | 4 (Q0 to Q3) | |
| | 2A Relay Output (Terminal No.) | 8 (Q4 to Q7, Q10 to Q13)) | 12 (Q4 to Q7, Q10 to Q13, Q14 to Q17) |
| | Transistor Output (Terminal No.) | 4 (Q14 to Q17) | – |
| User Program Storage | | Flash ROM (10,000 rewriting life) | |
| Backup Function | RAM | Backup data: Internal relay, shift register, counter current value, data register Note 2, clock data (year, month, and day) | |
| | Backup Duration | Approx. 30 days (typical) at 25°C after backup battery fully charge | |
| | Battery | Lithium | |
| | Charging Time | Approx. 15 hours for charging from 0% to 90% of full charge | |
| | Battery Life | 5 years | |
| | Replaceability | Not possible | |
| Clock Function Note 3 | | Clock accuracy: ±30 sec/month (typical) at 25°C | |
| Control System | | Stored program system | |

Specifications con't on next page

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

## Specifications con't

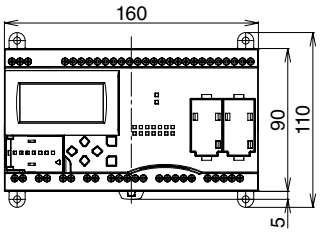
| Part Numbers | | FT1A-H40RKA, H40RSA, B40RKA, B40RSA | FT1A-H40RC, B40RC |
|---|---|---|---|
| Instruction Words | Basic Instructions | 42 | |
| | Advanced Instructions | DC: 125, AC: 111 | |
| Processing Time | Basic Instruction | 0.95ms (1000 steps) | |
| | END Processing | 640µs | |
| Internal Relay | | 1024 | |
| Shift Register | | 128 | |
| Data Register | | 2,000 | |
| Counter (adding, reversible) | | 200 | |
| Timer (1-sec, 100ms,10ms, 1ms) | | 200 | |
| Input Filter | | Without filter, 3 to 15ms (selectable in increments of 1ms) | |
| Catch Input/Interrupt Input | Input Points | 6 | |
| Self-diagnostic Function | | Keep data, Power failure, Clock error, Watchdog timer, Timer/counter preset value change error, User program syntax, User program execution, System error, Memory cartridge transfer error | |
| High-speed Counter | Points | Total 6 points | – |
| | Maximum Counter Frequency | Single/two-phase selectable: 100kHz (2 points) , Single-phase: 100kHz (4 points) | |
| | Counting Range | 0 to 4,294,967,295 (32 bit) | |
| | Operation Mode | Rotary encoder mode and adding counter mode | |
| Pulse Output (Maximum frequency: 100kHz) | Points | 2 (Q14, Q15) | – |
| Pulse Output (Maximum frequency: 5kHz) | Points | 2 (Q16, Q17) | – |
| Analog Voltage Input | Points (Terminal No.) | 6 (I22 to I27) | – |
| | Input voltage Range | 0 to 10V DC | |
| | Digital Resolution | 0 to 1000 | |
| USB Port | Points | 1 | |
| | USB Standard | USB 2.0 | |
| | Connector | Mini-B type | |
| Expansion Communication Ports | | 2 | |
| Ethernet Port | | 1 | |
| Memory Cartridge Connectors | | 1 | |
| SD Memory Card Slots | | 1 | |

1. Step is equivalent to 4 bytes.
2. Among data registers D0 to D1999, only D0 to D999 are backed up.
3. Set the calendar/clock using the clock function in WindLDR.

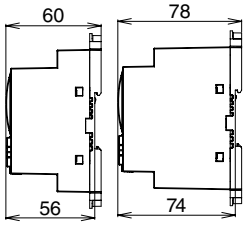
## Dimensions (mm)

With LCD

FT1A-H40*A/*C

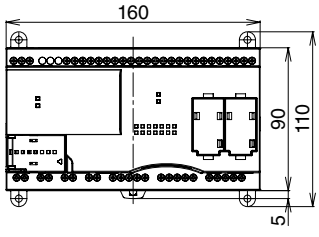



FT1A-H***A FT1A-H***C

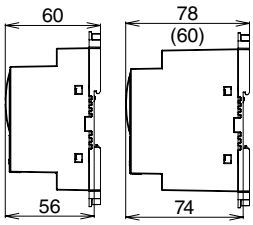



Without LCD

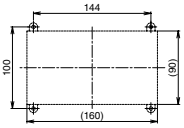
FT1A-B40*A/*C




FT1A-B***A FT1A-B***C




## Mounting Hole Layout




IDEC Corporation • 1175 Elko Drive • Sunnyvale, CA 94089 • 800-262-IDEC (4332) • Fax: 408-745-5258 • www.IDEC.com/usa

©2013 IDEC Corporation. All Rights Reserved. *03/13 PDF only*

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

**Artisan Technology Group** is an independent supplier of quality pre-owned equipment

## Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

## We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

## Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP