

MK043E-20DT HMI with Integrated PLC

Kinco

FEATURES

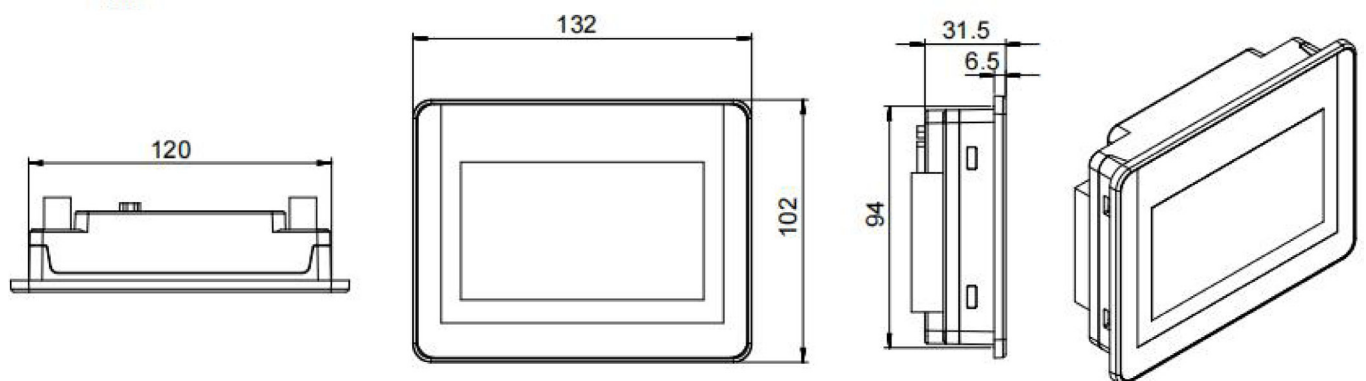
- **256K Colors**
- **LCD Lifetime up to 50,000 Hours**
- **480x272 Pixels**
- **4.3" LCD Display Screen**
- **HMI and PLC are attached**
- **IP65 Protection Level on Front Panel**
- **24 VDC Input Voltage**
- **Backlight LED**
- **128MB Flash and 64MB DDR2 Memory**
- **Communication Ports: USB2.0, RS485**



DESCRIPTION

The MK043E-20DT HMI with integrated PLC provides a reliable system to help your application run smoothly and efficiently. This HMI/PLC combination features a 256K color display mode that enhances your touch screen with rich color and incomparable resolution. The IP65-rated front screen is protected against dust ingress and may be subjected to low-pressure water jets. On the backside, the PLC is directly attached and integrated into the same package with the HMI. The PLC provides special I/O functions, a USB2.0 (USB-B Connector) programming port, four high-speed counters, four high-speed outputs, two RS485 communication/serial port(s), model dependent, integrated digital input and output channels, and more. Built-in high-speed pulse outputs can reach a maximum frequency of 50 KHz. KincoBuilder software provides absolute and relative positioning, homing, jogging, and quick stop instructions for programming the PLC functions, while DTools software is a convenient and powerful configuration software that allows the user to create first-class, efficient programs for the HMI. KincoBuilder and DTools software are both required to operate this integrated device, and are available for free on our website. With a quick and easy set-up, the MK043E-20DT series is an intelligent choice for users who need the functionality of an HMI and PLC in one powerful, streamlined package.

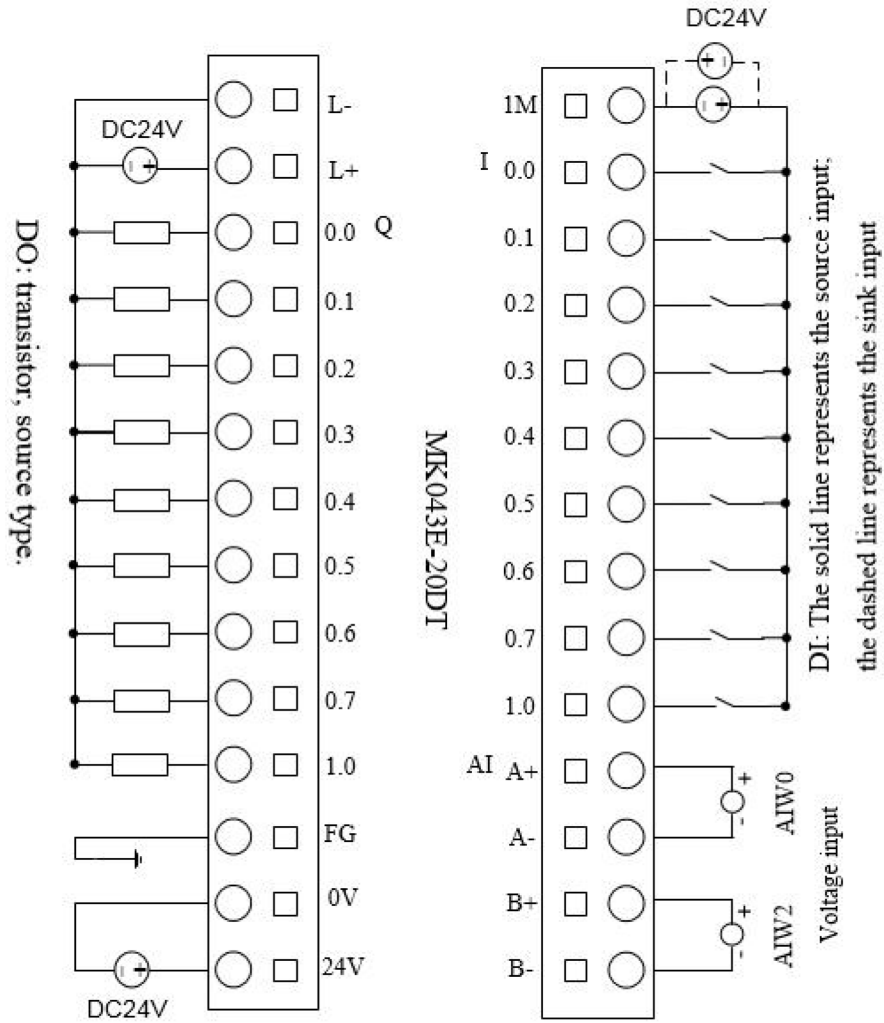
DIMENSIONS



Units are in mm

L011944

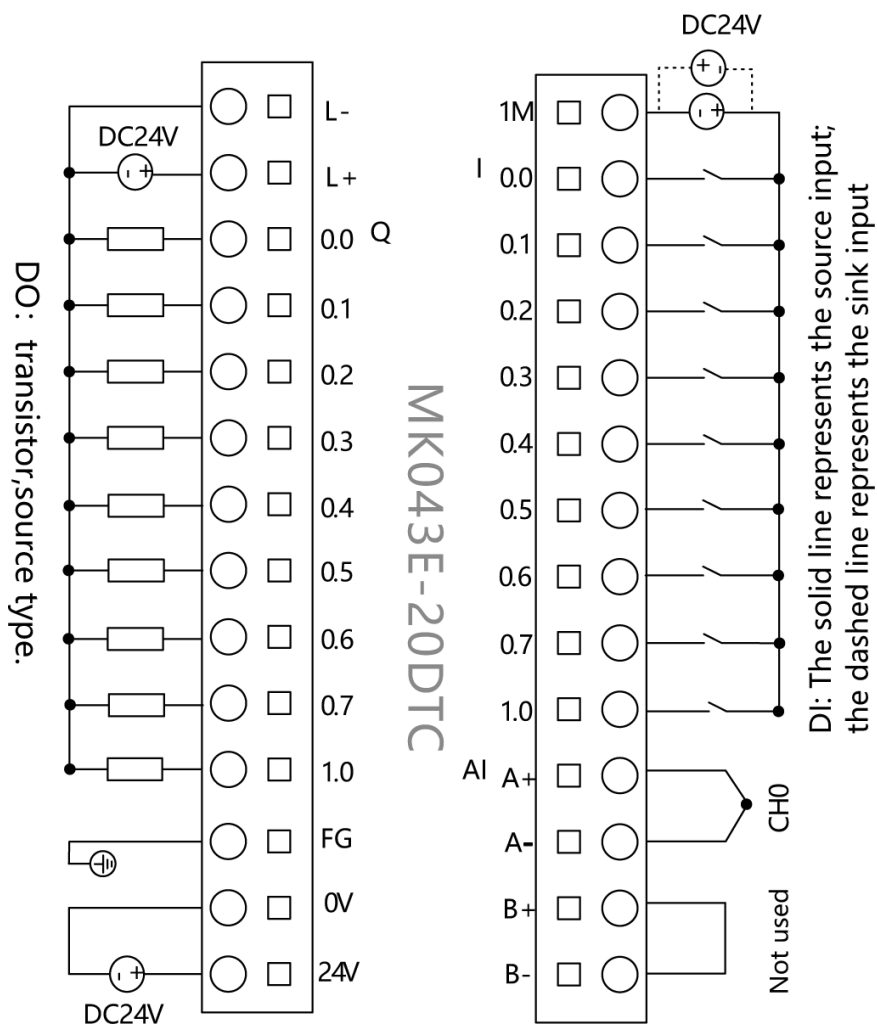
MK043E-20DT



RS485/CAN
(in DB9)

	FUNCTION	PIN
Port 1	A	6
	B	1
Port 2	A	9
	B	4
CAN	CANH	7
	CANL	2
GND	GND	5

MK043E-20DTC



RS485/CAN (in DB9)

	FUNCTION	PIN
Port 1	A	6
	B	1
Port 2	A	9
	B	4
CAN	CANH	7
	CANL	2
CND	CND	5

MK043E-20DT HMI with Integrated PLC



SPECIFICATIONS

Performance Specification	MK043E-20DT	MK043E-20DTC
Display	4.3" TFT	
Resolution	480x272 Pixels	
Color	256K Colors	
Backlight	LED	
Brightness	400 cd/m ²	
Backlight Life	50,000 Hrs	
Touch Panel	4-Wire Precision Resistance Network	
Processor	700 MHz RISC	
Memory	128MB Flash + 64MB DDR2	
Expandable Memory	1 USB Host	
Recipe Memory & RTC	256KB + RTC	
Program Download	1 USB Slave / Ethernet / USB Flash Disk	
Program Port	USB2.0 SLAVE	
CAN Communication Port	1 Supports CAN Free Communication	
Serial / COM Port	2*RS485 PORT1, PORT2, max. 115.2kbps PORT 1 supports Kinco programming protocol, MODBUS RTU master and slave protocol, free serial protocol. PORT 2 supports MODBUS RTU master and slave protocol, free serial protocol.	
High-Speed Counter	4 Supports Single-Phase, Double-Phase UP/DOWN, and AB Phase Pulse Input 4-Channel Maximum Counting Frequency: 50KHz	
High-Speed Output	4 Q0.0 Q0.1 Q0.4: Up to 50KHz (Each channel requires load resistance not exceed 3K Ω) Q0.5: Up to 10KHz	2 Q0.0 Q0.1 Q0.4: Up to 50KHz (Each channel requires load resistance not exceed 3K Ω) Q0.5: Up to 10KHz
Built-in Digital Points	9*DI 24VDC 9*DO 24VDC	
Built-in Analog Points	2*AI (only support voltage type) Supports 1-5V / 0-10V Signal	2*TC Supports J/K/E/T Type Thermocouples
Expansion Modules	Supports up to 8 KS Series Expansion Modules.	
Edge Interrupt	4, I0.0-I0.3 Can Be On/Off Interrupt	
Electrical Specification		
Rated Power	10W	
Rated Voltage	24 VDC	
Voltage Range	DC 20.4V - 28.8V	
Structure Specification		
Dimensions(mm)	132 x 102 x 31.5	
Cutout Size(mm)	119 x 93	
Weight (lbs)	0.55	
Environment Specification		
Operating Temperature	0 $^{\circ}$ ~ +50 $^{\circ}$ C	
Operating Humidity	10~90% Non-Condensing	
Storage Temperature	-10 $^{\circ}$ ~ +60 $^{\circ}$ C	
Storage Humidity	10~90% Non-Condensing	
Cooling Method	Natural Air Cooling	
Certification		
Degree of Protection	IP65 (Front Panel)	