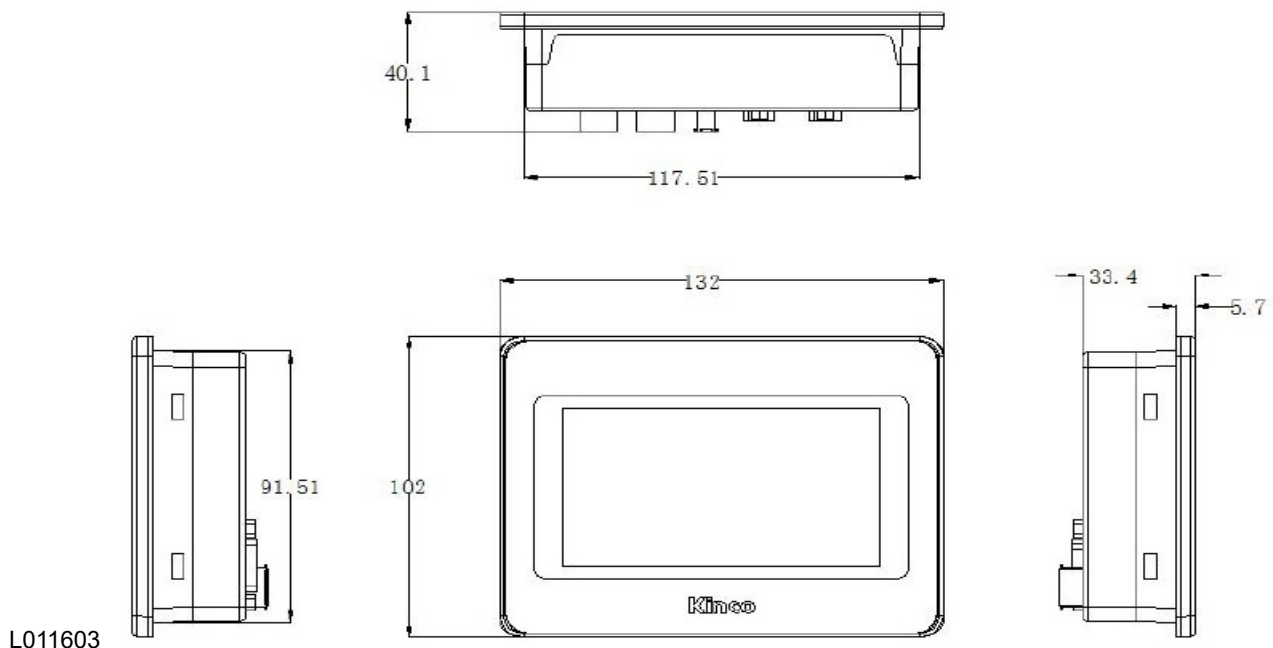## FEATURES

- *65536 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*
- *128M Flash and 32M DDR2 Memory*
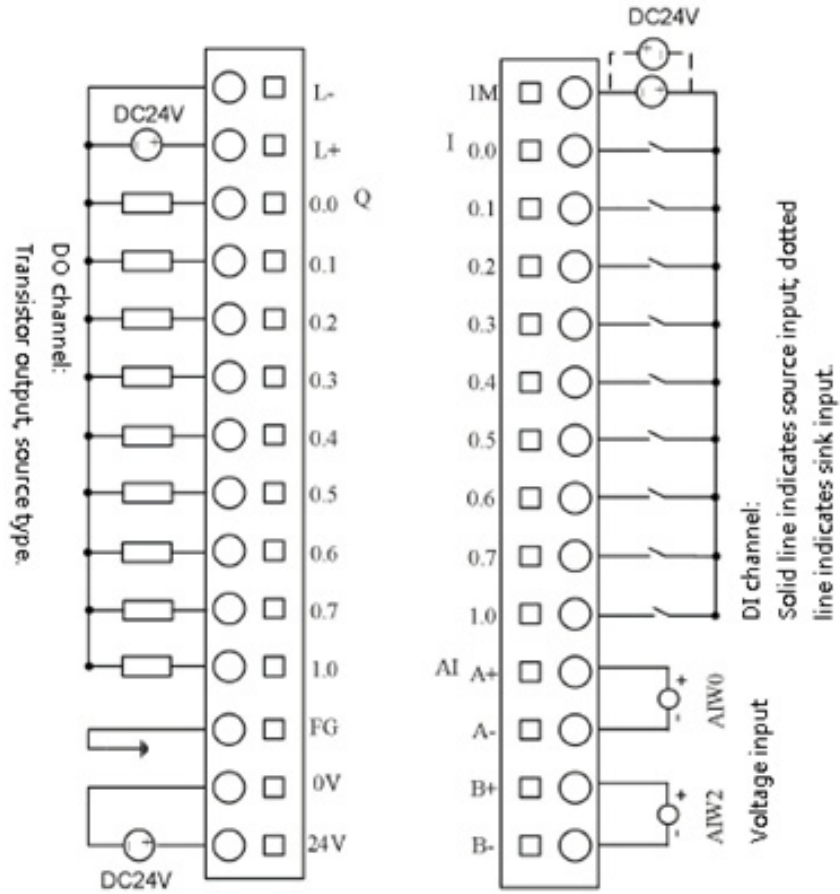- *Communication Ports: USB2.0, RS485*

DESCRIPTION

The KNC-HMI-HP043-20DT and KNC-HMI-HP043-20DTC are HMIs with integrated PLCs that provide a reliable system to help your application run smoothly and efficiently. This HMI/PLC combination features a 65536 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, three high-speed outputs, either one or 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 HP Builder software is a convenient and powerful configuration software that allows the user to create first-class, efficient programs for the HMI. KincoBuilder and HP Builder 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 KNC-HMI-HP043-20DT series is an intelligent choice for users who need the functionality of an HMI and PLC in one powerful, streamlined package.
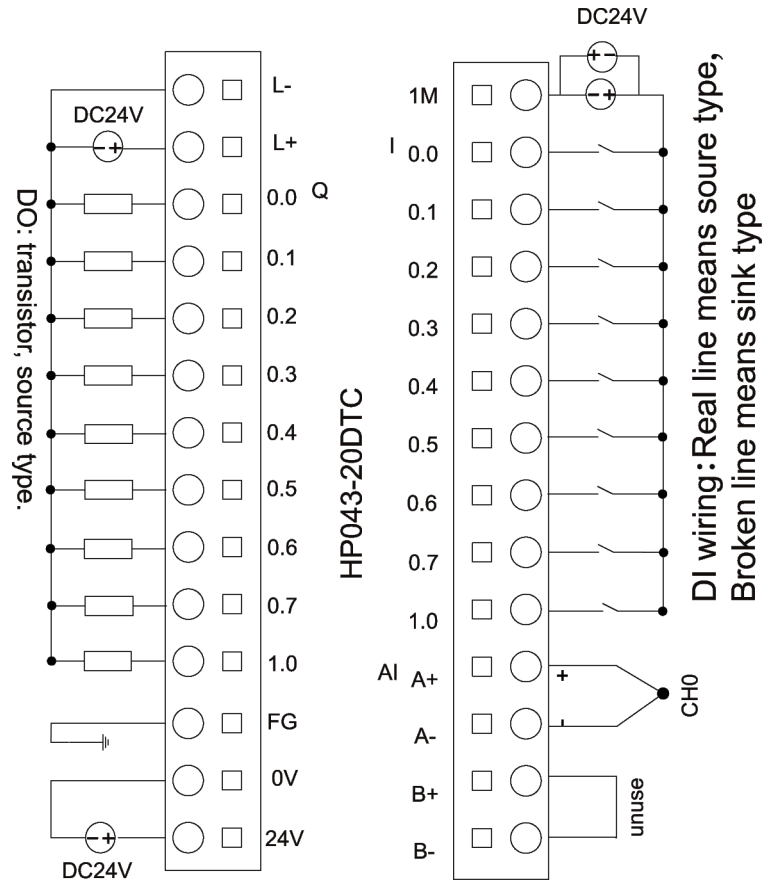
DIMENSIONS

40.1

117.51

132

91.51

102

33.4

5.7

Kinco

L011603

KNC-HMI-HP043-20DT

RS485 (PORT1)

	DEFINE	PIN
RS485+	A	6
RS485-	B	1
	GND	5

WIRING DIAGRAM

KNC-HMI-HP043-20DTC

RS485 (IN DB9)

	FUNCTION	PIN
Port 1	A	6
	B	1
Port 2	A	9
	B	4
	GND	5

SPECIFICATIONS

Performance Specification	KNC-HMI-HP043-20DT	KNC-HMI-HP043-20DTC
Display	4.3" TFT (16:9)	
Resolution	480x272 Pixels	
Color	65,536 Colors	
Backlight	LED	
Brightness	250 cd/m^2	
Backlight Life	50,000 Hrs	
Touch Panel	4-Wire Precision Resistance Network	
Processor	32-bit RISC CPU 520 MHz	
Memory	128M Flash + 32M DDR2	
Expandable Memory	1 USB Host	
Recipe Memory & RTC	256KB	
Program Download	1 USB	
Serial / COM Port	1*RS485, USB2.0, baud rate up to 115.2kbps Support programming protocol, Modbus RTU master/slave, free protocol	2*RS485, USB2.0, baud rate up to 115.2kbps Support programming protocol, Modbus RTU master/slave, free protocol
Built-in Digital Points	9*DI / 9*DO	
Built-in Analog Points	2*AI	2 Cold Junction Internal Compensationor External Compensation is Optional, J Type, K Type, E Type, S Type
Expansion Modules	None	
Electrical Specification		
Rated Power	2.4W	
Rated Voltage	24 VDC	
Input Range	12~28 VDC	
Voltage Range	DC 20.4V - 28.8V	
Insulation Resistance	> 50M Ω @ 500 VDC	
Dielectric Strength Test	500 VAC 1 Minute	
Structure Specification		
Shell Color	Black and Grey	
Shell Material	ABS	
Dimensions(mm)	132 x 102 x 40.1	
Cutout Size(mm)	119 x 93	
Weight (lbs)	0.75	
Environment Specification		
Operating Temperature	0°~ +50° C	
Operating Humidity	10~90% Non-Condensing	
Storage Temperature	-10°~ +60° C	
Storage Humidity	10~90% Non-Condensing	
Cooling Method	Natural Air Cooling	
Certification		
Degree of Protection	IP65 (Front Panel)	