

INNCOM X45B CONTROLLER

Universal multi-functional controller

The X45B Controller Card is a CBL32 universal multi-functional analog/digital input/output controller device that can be used in low-voltage applications, or used with the X06 Remote HVAC Controller for line-voltage or mixed voltage applications.

As a component of the guestroom Energy Management System, the X45B Controller Card receives control signals from the guestroom's Smart Digital Thermostat or other in-room control devices through a low-voltage wired S5 Bus connection. The control signal triggers the X45B Controller Card to open or close the appropriate relay contact on the X06 Controller, with a corresponding response from the guestroom's HVAC unit or other devices.

The X45B-X06 is a relay assembly containing a universal power supply. It is used to increase and enhance the output capability of other INNCOM products such as an e7 Digital Thermostat. It is intended for use with

- PTAC, heat pump and FCU actuator
- Five channel light controller
- Master contactor

The X45B communicates with the e7 or other in-room devices through a wired S5 bus. X45B supports two external temperature sensors, two analog outputs, seven digital inputs and two general purpose I/O's.

FEATURES AND BENEFITS

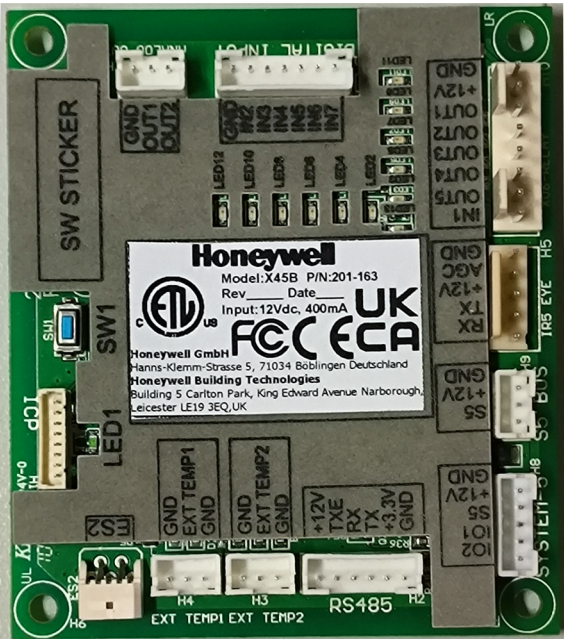
- S5bus hardened against over voltage
- 2 analog inputs for remote thermistor
- System 5 Header
- X06 relay chassis interface (8-pin connector)
- Status LED for each relay
- Versatile hardware platform
- 6 digital input header, with status LED
- Analog outputs 0-10VDC

COMPATIBILITY/FUNCTION COMPARED TO THE REPLACEMENT PART – X05B

PARAMETER	SPECIFICATION
Is it straight swap for the replacement?	YES
Is any rewiring required?	NO
Is the new unit the same footprint?	YES
Are the new units compatible with the replacement?	YES
Is any re-programming work required on the server side and rest of the hardware products in a same room?	NO

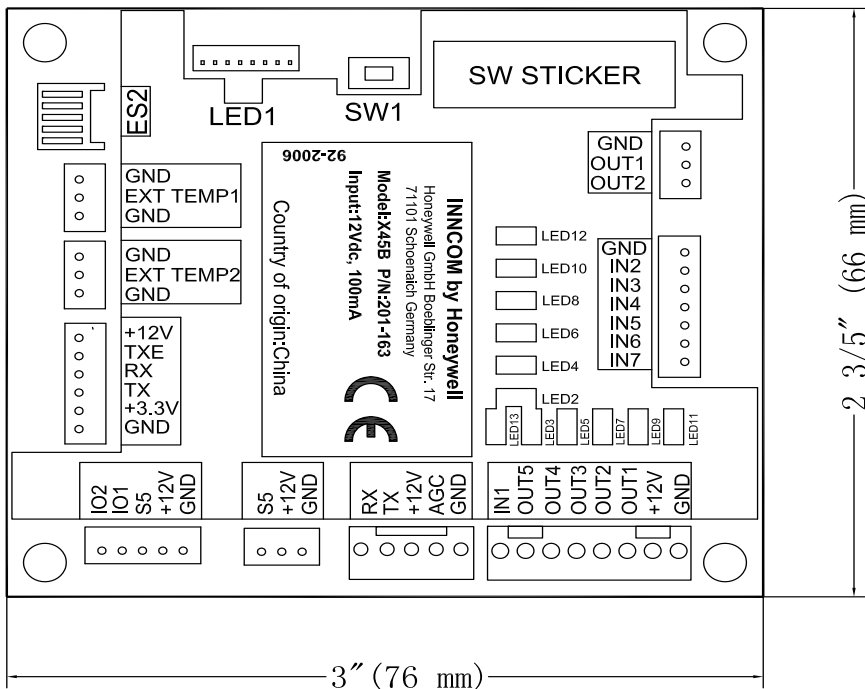
LOAD RATINGS

X06	INPUT	K1-K5 RELAY OUTPUT (N.C.)	K1-K5 RELAY OUTPUT (N.O.)
General Purpose Load	120-277VAC 60 Hz,110mA	30A, 240AC, GP 30A, 30VDC 1½ HP 250 VAC 20A, 277VAC, GP	40A, 240VAC, Res 2HP 250VAC 30A, 277VAC



DIMENSIONS AND OVERVIEW

Depth: 3/5 "(15mm)



TECHNICAL SPECIFICATIONS

POWER

SPECIFICATION	RANGE/VALUE
Input Voltage	12 VDC
Device Power Consumption	12 VDC, 70 mA.

APPROVALS

APPROVALS	
IC	ICES-003 Issue Class B Digital Apparatus emissions requirements (Canada)
CE	EN 61000-3-2:2006/A1:2009/A2:2009 Limits for harmonic current emissions EN 61000-3-3:2008 Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current up to and including 16A EN61000-6-3:2007/A1:2011 Emissions requirements for residential, commercial and light-industrial environments - Generic EN 61000-6-1:2007 Immunity for residential, commercial and light- industrial environments - Generic
RoHS	EN 50581
FCC	Part 15

MOUNTING

SPECIFICATION	RANGE/VALUE
Mounting	3" (76 mm) Mounting rail

DIMENSIONS

SPECIFICATION	RANGE/VALUE
Dimensions (LxWxH)	3 x 2 3/5 x 3/5 inches (76 x 66 x 15 mm)

ENVIRONMENT

SPECIFICATION	RANGE/VALUE
Operating Temperature	40 to 150 ° F (5 to 65 ° C)
Relative Humidity	15-99% RH

ORDERING INFORMATION

PART #	MODEL	DESCRIPTION
03-1492-X45B.P	X45B	X45B 5 outputs/inputs 2 0-10VDC outs

COMPONENTS

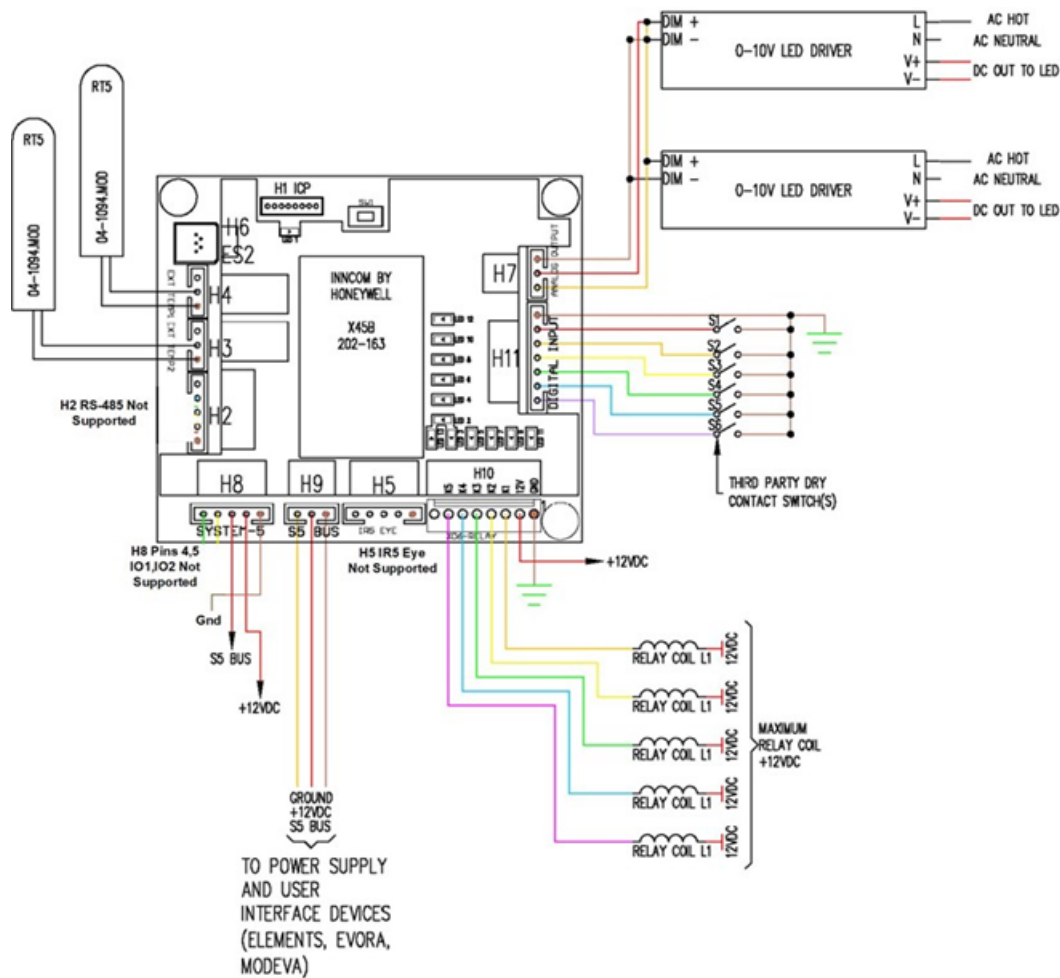
MODEL	DESCRIPTION
202-163	X45B Control Board
62-1465-B	3-pin Pigtail for H9 S5bus, H7 Analog Out
62-1511-A0	5-pin Pigtail for H8 System 5
62-1467	6-pin Pigtail for H2 RS485
04-1096	RT5 Remote Thermistor H3, H4 External Temp
03-0501	ST-Link V2 STM32 Programmer Kit

X45B HEADERS

HEADERS	PIN	SIGNAL	FUNCTION
H1-ISP Programming	1	GND	Power
	2	VCC	Power (+3.3V)
	3	SCI2_TX	Transmit
	4	SCI2_RX	Receive
	5	NRST	Reset
	6	SWO	Oscillator
	7	SWCLK	Clock
	8	SWDIO	Power
H2-RS-485 Not Implemented	1	GND	Power
	2	3.3VDC	Power (+3.3V)
	3	RS485_TX	Transmit
	4	RS485_RX	Receive
	5	RS485_TXE	Reset
	6	SWO	Oscillator
H3-EXT Temp 2	1	GND	Ground
	2	Ext temp 2	Analog In 2
	3	GND	Ground
H4-EXT Temp 1	1	GND	Ground
	2	Ext temp 2	Analog In 1
	3	GND	Ground
H5-IR5 Eye Input Not Implemented	1	GND	Ground
	2	AGC	Automatic Gain Control
	3	12VDC	Power
	4	IR5TX	Transmit
	5	IR5RX	Receive
H6-ES2 Not Implemented	1	GND	Ground
	2	12VDC	Power
	3	S5bus	Communication bus
	4	SCLK	Clock
	5	SDATA	Data
H7-Analog Output	1	GND	Ground
	2	Analog Output	Analog Output 1
	3	Analog Output	Analog Output 2
H8-System 5 Pins 4,5 IO1, IO2 Not Implemented	1	GND	Ground
	2	12VDC	Power
	3	S5bus	Communication bus
	4	I/O 1	GPIO(dry contact input, digital output, UART)
	5	I/O 2	GPIO(dry contact input, digital output, UART)
H9-S5bus	1	GND	Ground
	2	12VDC	Power
	3	S5bus	Communication bus

H10 Outputs	1	GND	Ground
	2	12VDC	Power
	3	Out1	Relay1 Control
	4	Out2	Relay2 Control
	5	Out3	Relay3 Control
	6	Out4	Relay4 Control
	7	Out5	Relay5 Control
	8	IN1	Input 1
H11 Inputs	1	GND	Ground
	2	IN2	Input2
	3	IN3	Input3
	4	IN4	Input4
	5	IN5	Input5
	6	IN6	Input6
	7	IN7	Input7

WIRING DIAGRAM



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