

24 VDC Panel mounted timer monofunction with 0.5 min..10 min delay

XB5DTB24

Main

Range of product	Harmony XB5		
product or component type	Timer		
Sale per indivisible quantity	1		

Complementary

Complementary				
Bezel material Plastic				
Fixing collar material	Plastic			
Mounting diameter	22 mm			
Panel Thickness	16 mm			
Shape of signaling unit head	Round			
time delay range	0.510 min			
time delay type	A			
Repeat accuracy	+/- 0.5 %			
Setting accuracy of time delay +/- 10 % of full scale at 25 °C conforming to IEC 61812-1				
Temperature drift +/- 0.05 %/°C				
Voltage drift	+/- 0.2 %/V			
Protection type	Reverse polarity protection Overvoltage protection			
Pollution degree	3 conforming to IEC 60664-1			
Output type	Open collector PNP			
Temporary permissible current	porary permissible current 10 A for 0.01 s			
Minimum switching current	10 mA			
Voltage drop in closed state 3 V				
Nominal rating	200 mA at 20 °C(derating 1.5 mA per °C)			
Residual current in open state	0.1 mA			
maximum power consumption in W	1 W			
Reset time	5 ms after time delay on de-energisation 7 ms during time delay on de-energisation			
Local signalling	LED green, flashing for timing in progress LED, steady for no timing in progress and output relay energised			
[Us] rated supply voltage	24 V DC			
Supply voltage limits	16.831.2 V DC			

Output short-circuit protection	Yes
Connections - terminals	Screw terminals 1 x 4 mm² conforming to IEC 60947-1 Screw terminals 1 x 2.5 mm² conforming to IEC 60947-1
IP degree of protection	IP65 front: conforming to IEC 60529 IP20 back: conforming to IEC 60529
Ambient air temperature for operation	-2060 °C
Ambient air temperature for storage	-2080 °C
Tightening torque	0.5 N.m
Dielectric strength	1500 V conforming to IEC 61812-1
[Ui] rated insulation voltage	50 V conforming to IEC 60947-1 50 V conforming to IEC 60664-1
[Uimp] rated impulse withstand voltage	4 kV conforming to IEC 60947-1 4 kV conforming to IEC 60664-1
Surge withstand	1 kV, level 2 conforming to IEC 61000-4-5
Overvoltage category	Class 3 conforming to IEC 60536 Class 3 conforming to IEC 60664-1
Vibration resistance	0.15 mm (f= 1060 Hz) conforming to IEC 60068-2-6 2 gn (f= 60150 Hz) conforming to IEC 60068-2-6
Shock resistance	+/- 15 gn for 11 ms (6 shocks on each axis) conforming to IEC 60068-2-27
Resistance to fast transients	2 kV class level 3 conforming to IEC 61000-4-4
Electromagnetic compatibility	Electrostatic discharge 6 kV level 3 conforming to IEC 61000-4-2 Electromagnetic emission class B conforming to IEC 55011
Resistance to electromagnetic fields	10 V/m 80 MHz1 GHz level 3 conforming to IEC 61000-4-3 3 V/m 1.42 GHz level 2 conforming to IEC 61000-4-3 1 V/m 22.7 GHz level 1 conforming to IEC 61000-4-3
Immunity to radioelectric fields	10 V level 3 conforming to IEC 61000-4-6
Disturbance radiated/conducted	Class B conforming to EN 50022
Standards	UL 508 IEC 61812-1
Product certifications	CE UL listed
device presentation	Monolithic product
Height	62 mm
Diameter	29 mm
net weight	0.027 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.2 cm
Package 1 Width	3.2 cm
Package 1 Length	7.5 cm
Package 1 Weight	28.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	24
Package 2 Height	15.0 cm

Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	850.0 q

Sustainability

Weee

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Well-being performance

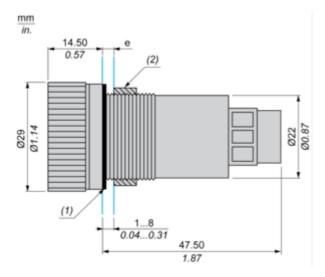
Mercury Free	
Rohs Exemption Information	Yes
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration

collection and never end up in rubbish bins

The product must be disposed on European Union markets following specific waste

Dimensions Drawings

Dimensions



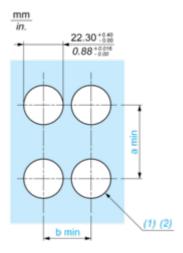
- (e) Clamping thickness: 1 mm to 6 mm / 0.03 in. to 0.24 in. (1) Sealing ring
- (2) Screw

XB5DTB24

Mounting and Clearance

Panel Cut-out for Analog Timer (Finished Holes, Ready for Installation)

Connection by Screw Clamp Terminals or Plug-in Connectors



(1) Diameter on finished panel or support

(2) Ø22 mm recommended (Ø22.3 0+0.4) / Ø0.89 in. recommended (Ø0.88 in. 0^{+0.016})

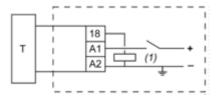
(2) 922 min recommended (922.3 0+0.4) / 90.69 m. recommended (90.66 m. 0					
Connections	a in mm	a in in.	b in mm	b in in.	1
By screw clamp terminals or plug-in connector	50	1.97	30	1.18	

Product datasheet

XB5DTB24

Connections and Schema

Wiring Diagram



 ${\bf T}: {\sf Timer}$

(1) Load A1 - A2 : Supply (24VDC)

XB5DTB24

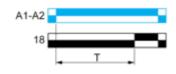
Technical Description

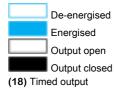
Function A : On Delay Timer

Description

The timing period T begins on energisation with blinking LED indication. After timing, the output (18) closes and LED goes steady

Function: Output





(18) Timed output (A1- A2) Supply