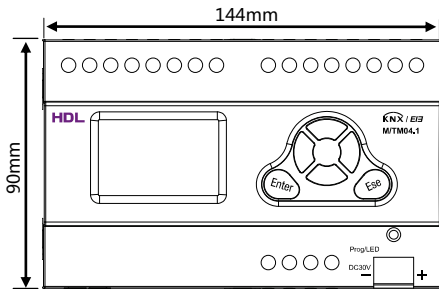
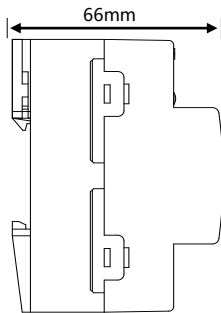
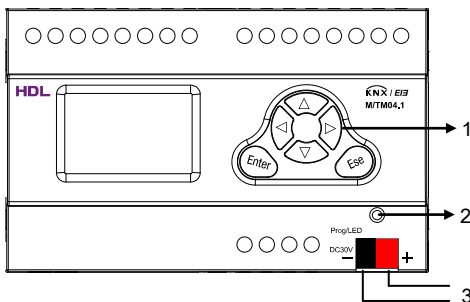


Figure 1. Master/Slave Timer Controller
图 1. 定时器Figure 2. Dimensions - Front View
图 2. 尺寸图 - 正面Figure 3. Dimensions - Side View
图 3. 尺寸图 - 侧面Figure 4. Wiring
图 4. 接线图

Overview

With 4 independent channels and real-time clock, Master/Slave Timer Controller (See Figure 1) is capable of running standard time as the master clock or slave clock. The master clock sends the clock information cyclically to KNX/EIB bus to control the schedule, while the slave clock achieves synchronization after receiving the master clock information and also realizes the control of schedule.

Functions

- Multiple routine modes: Year routine, Month routine, Week routine, Day routine, Special day
- Control target types: Switching control, Alarm control, Shutter control, Scene control, Sequence control, Percentage control, Threshold control
- Power on recovery
- Working modes: Master /slave clock

Important Notes

- Installation - Distribution board.
- Programming - The device is compliant with KNX Standard and the parameters are set via the Engineering Tool Software (ETS).
- The KNX bus voltage is 21-30V DC.

Product Information

Dimensions - See Figure 2 - 3

Wiring - See Figure 4

- Control button
 - 【Enter】 Confirm Button
 - 【Esc】 Esc button
 - 【△】 Page up, used for manual modification, value increases when pushing button
 - 【▽】 Page down, used for manual modification, value decreases when pushing button
 - 【<】 Left Move, used for selecting items and cursor location
 - 【>】 Right Move, used for selecting items and cursor location
- Programming button & indicator
- KNX/EIB Bus connector

Installation - See Figure 5 - 7

- Step 1. Fix the din rail with screws.
- Step 2. Buckle the bottom cap of the Master/Slave Timer Controller on the edge of the din rail.
- Step 3. Press the device on the din rail, slide it and fix it up until an appropriate position is adjusted.

Safety Precautions



- The installation and commissioning of the device must be carried out by HDL or the organization designated by HDL. For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.
- The device should be installed with Din rail in DB box. HDL does not take responsibility for all the consequences caused by installation and wire connection that are not in accordance with this document.
- Please do not privately disassemble the device or replace parts, otherwise it may cause mechanical failure, electric shock, fire or body injury.
- Please resort to our customer service department or designated agencies for maintenance service. The warranty is not applicable for the product fault caused by private disassembly.

Package Contents

M/TM04.1*1 / Datasheet*1

产品概述

定时器（见图1）具有4个独立通道，内嵌实时时钟，能够自身运行标准时间，作为主时钟或子时钟。主时钟及子时钟均可实现对日程的控制，其中，子时钟循环向KNX/EIB总线发送时钟信息，而时钟在接收主时钟信息后达成同步。

功能说明

- 定时器支持多种日程模式：年日程，月日程，周日程，天日程，特别天
- 控制目标包括：开关控制，警报控制，窗帘控制，场景控制，序列控制，百分比控制，阈值控制
- 掉电恢复功能
- 工作模式包括主从模式

注意事项

- 安装位置- 配电箱。
- 编程- 本设备属于KNX标准系统设备，使用ETS软件进行编程
- 总线电压- 21-30V DC

产品信息

产品尺寸- 见图 2-3

产品接线- 见图 4

- 控制按键
 - 【Enter】确认键
 - 【Esc】退出键
 - 【△】上翻键，该键在操作中作修改设置值，按该键，值增加
 - 【▽】下翻键，该键在操作中作修改设置值，按该键，值减小
 - 【<】左移键，该键在操作中作设置项、设置位选择
 - 【>】右移键，该键在操作中作设置项、设置位
- 编程按键&指示灯
- KNX/EIB接口

设备的安装- 见图 5-7

- 步骤1. 首先用螺丝固定导轨。
- 步骤2. 将定时器底盖的一端扣到导轨的边上。
- 步骤3. 将整个模块压到导轨上，并滑动模块直至调整到合适的位置则固定下来。

安全警告



- 本设备的安装及调试工作必须由我司或我司指派的机构进行。其电气安装的计划和施工，必须遵守当地相关的安全标准和法规。
- 该产品需以导轨安装方式，安装在配电箱里，未按照本说明书进行安装及接线方式的，所造成的一切后果皆与我司无关。
- 请不要私自拆装或更换零部件，否则可能会导致机械故障、电击、火灾或身体伤害。
- 请将一切维修工作交由我司售后部门或指定机构进行，本产品的保修范围不适用于因用户拆卸产品而导致的故障。

装箱清单

M/TM04.1*1 / 说明书*1

Technical Data

Electrical Parameters

Working voltage	21~30V DC
Working current	10mA/30V DC
Communication	KNX
KNX terminals	0.6 – 0.8mm Diameter Single Core Cable

External Environment

Working temperature	-5°C~45°C
Working relative humidity	≤90%
Storage temperature	-20°C~60°C
Storage relative humidity	≤93%

Specifications

Dimensions	144mm×90mm×66mm
Net weight	240g
Housing material	Nylon
Installation	35mm DIN rail installation (See Figure 5 - 7)
Protection rating (Compliant with EN 60529)	IP20

Name and Content of Hazardous Substances in Products

Components	Hazardous substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Chromium VI (Cr (VI))	Poly-brominated biphenyls (PBB)	Poly-brominated diphenyl ethers (PBDE)
Plastic	o	o	o	o	o	o
Hardware	o	o	o	o	-	-
Screw	o	o	o	x	-	-
Solder	x	o	o	o	-	-
PCB	x	o	o	o	o	o
IC	o	o	o	o	x	x

The symbol "-" indicates that the hazardous substance is not contained.

The symbol "o" indicates that the content of the hazardous substances in all the homogeneous materials of the component is below the limit requirement specified in the Standard IEC62321-2015.

The symbol "x" indicates that the content of the hazardous substance in at least one of the homogeneous materials of the part exceeds the limit requirement specified in the Standard IEC62321-2015.

KNX Cable Guide

KNX	KNX cable
-	Black
+	Red

技术参数

电气参数

工作电压	21~30VDC
工作电流	10mA/30V DC
通信协议	KNX
KNX总线接线端子	0.6 – 0.8mm 单芯电缆

外部环境

工作温度	-5°C~45°C
工作相对湿度	≤90%
储存温度	-20°C~60°C
储存相对湿度	≤93%

产品规格

尺寸	144mm×90mm×66mm
净重	240g
外壳材料	尼龙
安装方式	35mm 丁导轨安装 (见图5-7)
防护级别 (符合 EN 60529)	IP20

产品中有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
塑胶组件	o	o	o	o	o	o
五金铜件	o	o	o	o	-	-
螺丝组件	o	o	o	x	-	-
焊锡	x	o	o	o	-	-
PCB组件	x	o	o	o	o	o
IC	o	o	o	o	x	x

- : 表示不含有该有害物质。

o : 表示该有害物质在该部件所有均质材料中的含量均在IEC62321-2015规定的限量要求以下。

x : 表示该有害物质至少在该部件的某一均质材料中的含量超出IEC62321-2015规定的限量要求。

KNX总线定义

KNX	KNX 电缆
-	黑
+	红



Figure 5 / 图 5

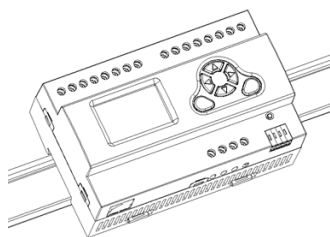


Figure 6 / 图 6

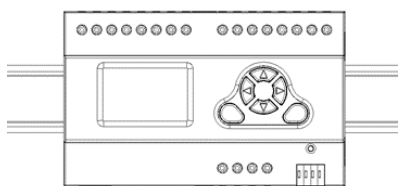


Figure 7 / 图 7

Figure 5 - 7. Installation
图 5 - 7. 安装图

技术支持

服务热线：020-85820195

(工作时间：9:00-12:00, 13:00-18:00, 星期一至星期五)

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