# SIEMENS

CE

Gamma instabus

Gamma arina 触摸开关

Gamma arina touch sensor

操作与安装手册 Operating and Mounting Instructions

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产品	颜色	单联双键触摸开关		双联四键触摸开关		四联八键触摸开关	
		订购号 (SSN)	产品型 <del>号</del> (ASN)	订购号 (SSN)	产品型号 (ASN)	订购号 (SSN)	产品型号 (ASN)
无开关指示 LED,有运行指 示 LED	象牙白色	5WG1201-2DB12	UP201/12	5WG1202-2DB12	UP202/12	5WG1203-2DB12	UP203/12
有开关指示 LED,有运行指示 LED	象牙白色	5WG1201-2DB13	UP201/13	5WG1202-2DB13	UP202/13	5WG1203-2DB13	UP203/13
	黑色	5WG1201-2DB23	UP201/23	5WG1202-2DB23	UP202/23	5WG1203-2DB23	UP203/23
	烟灰金	5WG1201-2DB43	UP201/43	5WG1202-2DB43	UP202/43	5WG1203-2DB43	UP203/43
有开关指示 LED、运行指示	象牙白色					5WG1203-2DB14	UP203/14
LED、场景控制和内置温度							
传感器							

Product	Color	Touch sensor, single		Touch sensor, double		Touch sensor, quadruple	
		Order number (SSN)	Product type (ASN)	Order number (SSN)		Order number (SSN)	Product type (ASN)
Without status LED and with orientation LED	Ivory white	5WG1201-2DB12	UP201/12	5WG1202-2DB12	UP202/12	5WG1203-2DB12	UP203/12
With status LED and orientation LED	Ivory white Black Ash gold	5WG1201-2DB13 5WG1201-2DB23 5WG1201-2DB43	UP201/13 UP201/23 UP201/43	5WG1202-2DB13 5WG1202-2DB23 5WG1202-2DB43	UP202/13 UP202/23 UP202/43	5WG1203-2DB13 5WG1203-2DB23 5WG1203-2DB43	UP203/13 UP203/23 UP203/43
With status LED, orientation LED, scene controller, and room temperature sensor	Ivory white					5WG1203-2DB14	UP203/14

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### 产品和应用描述

Gamma arina 触摸开关具备单联双键、双联四键和四联八键。产品的中间区域为标签区域,标签可以更换。

Gamma arina 触摸开关类型如下:

- 触摸开关--单联双键、双联四键和四联八键;有运行指示 LED;无开关指示 LED
- 触摸开关--单联双键、双联四键和四联八键;有运行指示 LED 和开关指示 LED
- ◆ 触摸开关--四联八键: 有运行指示 LED、开关指示 LED、场景 控制和内置温度传感器

触摸开关需要借助安装框\*(睿致系列)固定于 86 mm x 86 mm 的接线盒上。

\*安装框包含在产品包装盒内。

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### Product and Applications Description

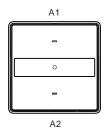
The touch sensors for the Gamma arina have one, two or four vertically arranged pairs of sensitive touch areas. A paper foil is placed in the middle between these sensitive touch areas for labeling. The paper foil is replaceable.

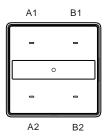
These types of touch sensors are available:

- Touch sensor single, double and quadruple, with one orientation LED, without status LED.
- Touch sensor single, double and quadruple, with one orientation LED and with one status LED per touch area.
   Touch sensor quadruple, with one orientation LED, one status
- Touch sensor quadruple, with one orientation LED, one status LED per touch area, scene controller, and room temperature sensor.

The touch sensors are mounted together with the mounting frame \* DELTA® arina onto an 86 mm x 86 mm conduit box.

\* The mounting frame is included in the product package.





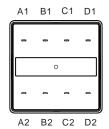


图 1 / Figure 1

#### 产品和应用描述

#### 通用功能

#### 触摸按键

依型号不同,触摸开关提供二至八个触摸按键(图1: A1、A2、 B1、B2、C1、C2、D1、D2), 组成上下对应的开关对(A至

上下对齐的触摸按键可以成对使用(例如指定其用于开关/调光或 用于控制百页窗和卷帘,即上方触摸按键用于开灯,下方触摸按键用于关灯); 也可以独立使用,用于发送数值、开关/调光或控 制百页窗和卷帘。

每个触摸按键 (A1、A2、B1、B2、C1、C2、D1、D2) 可以独立 实现下列功能:

- 开关(开、关、切换)
- 门铃
- 单键调光
- 单键遮阳(百叶窗、卷帘)控制
- 一位场景控制(场景1或场景2:回放/保存)
- 八位场景控制/效果控制(回放、回放/保存)
- 发送数值(八位数值、百分比数值)
- 发送数值(十六位数值、温度值、亮度数值)

根据所选定的主要功能不同,能够以延迟(配置范围 100 ms 至 655 s) 执行或长按触摸区执行这两种不同方式实现附加功能。

如果触摸按键被配置成对,可以指定其实现以下功能:

- 双键调光并发送停止报文
- 双键遮阳 (百叶窗、卷帘) 控制
- 发送可变的百分比数值
- 发送可变的八位数值
- 一位场景控制(场景 1 和场景 2:回放/保存)
- 八位场景控制/效果控制 (回放/保存)
- 强制控制

根据所选定的主要功能不同,能够延迟(配置范围 100 ms 至 655s) 执行附加功能。

对于单个触摸按键或成对触摸按键,可以选择使用以下附加功能 或替代功能:

- 开关(开)
- 开关(关)
- 发送百分比数值
- 发送八位数值(0...255)
- 发送温度值
- 发送亮度值
- 发送十六位数值 (0...65535)
- 一位场景控制(场景 1:回放/保存) 一位场景控制(场景 2:回放/保存)
- 八位扬号控制/效果控制,同放
- 强制开启
- 强制关闭
- 强制控制撤销

# 按键声音反馈

<u>触摸开关具备</u>内置蜂鸣器,能在按键被按下时发声。

# 运行指示 LED

触摸开关的运行指示 LED 可以持续点亮或熄灭,或者根据对象的 状态点亮或熄灭。运行指示 LED 提供以下可选配置:

- IFD 常亮
- LED 指示用户操作
- IFD 指示长按触摸按键
- 由二进制状态对象控制各个 LED 状态 on (=1) 或 off (=0), 分别对应:
  - 点亮
  - 0 熄灭
  - 闪烁, 低频率 (0.3 Hz) 0
  - 闪烁, 中频率 (1 Hz)
  - 闪烁, 高频率 (5 Hz)
- 由模拟状态对象(八位数值 [0...255]、百分比数值、十六位数值 [0...65535]、温度值 [0°C...40°C]、亮度值 [0...2000 lux] 控制各个 LED 最多三个数值范围,分别对应:
  - 点亮 0
  - 熄灭
  - 闪烁, 低频率 (0.3 Hz)
  - 闪烁, 中频率 (1 Hz) 0
  - 闪烁, 高频率 (5 Hz)

运行指示 LED 亮度可配置并能通过对象进行控制(如夜间操

# 可选功能

开关指示 LED

[无开关指示 LED 的产品型号: UP201/x2、UP202/x2、 UP203/x21

开关指示 LED 的可选配置与运行指示 LED 相同。

所有开关指示 LED 的亮度均可手动配置并能通过对象进行控制 (加夜间操作)

该 LED 可以配置为循环短促闪烁,以便于用户在黑暗环境中发现

### Product and Applications Description

#### Common functions

Depending on the model a touch sensor provides two to eight touch areas (Figure 1: A1, A2, B1, B2, C1, C2, D1, D2), which vertically function as a touch area pair (A to D).

Vertically aligned touch areas may be used as a pair of touch areas (e.g. for defined switching / dimming, or control of shutters and blinds, i.e. with the upper touch area light is turned on and with the lower touch area light is turned off), or as single touch areas for sending values, single-touch-area switching ldimming or single-touch-area control of blinds.

Each individual touch area (A1, A2, B1, B2, C1, C2, D1, D2) may be assigned one of the following functions:

- Switching (on, off, toggle)
- Door bell function
  Single touch area dimming
- Single touch area control of solar protection (blinds, roller shades)
- 1-bit scene control (scene 1 or 2: recall / save)
- 8-bit scene / effect control (recall, recall / save)
- Send value (8-bit value, percent)
- Send value (16-bit value, temperature value, brightness value)
- Forced control

Depending on the selected main function another function may be executed either additionally after a time delay (time delay configurable from 100 ms to 655 s) or alternatively when the touch area is pressed for a longer period.

When touch areas are configured as a pair then this touch area pair may be assigned one of the following functions:

- Dual-touch-area dimming with stop telegram
- Dual-touch-area control of solar protection (blinds, roller)
- shades) Send variable percent value
- Send variable 8-bit value
- 1-bit scene control (scene 1 and 2: recall / save)
- 8-bit scene / effect control (recall / save)
- Forced control

Depending on the selected main function another function may be executed additionally after a time delay (time delay configurable from 100 ms to 655 s).

These options are available as additional or alternative functions for single touch areas or touch area pairs:

- Switching (on)
- Switching (off)
- Send percent value
- Send 8-bit value (0...255)
- Send temperature value Send brightness value
- Send 16-bit value (0...65535)
- 1-bit scene control (scene 1: recall / save)
- 1-bit scene control (scene 2: recall / save)
- 8-bit scene / effect control: recall
- Forced on
- Forced off
- Deactivate forced control

### Acoustic touch response

The touch sensor has an internal beeper. This is used as a response when a touch area is pressed.

Orientation lighting
The orientation light (LED) of the device may be turned on or off continuously or depending on a status object. These configuration options are available for the orientation light (LED)

- LED permanently off
- LED permanently on
- LED indicates user operation
- LED indicates long touch area press
- A binary status object controls the LED for each status value on (=1) or off (=0) respectively to either
  - on 0
  - 0 off
- flash, slowly (0,3 Hz) 0
- flash, moderately (1 Hz) flash, fast (5 Hz)
- analog status object (8-bit value [0...255], percent value, 16-bit value [0...65535], temperature value [0°C...40°C], brightness value [0...2000 lux] controls the LED for each of up to three value ranges respectively to either
  - on
  - off
  - flash, slowly (0.3 Hz) 0
  - flash, moderately (1 Hz)
- flash, fast (5 Hz)

The brightness of the orientation light is configurable and may be controlled via object (e.g. for night operation).

### Additional functions

Status LED

Not available with UP201/x2, UP202/x2 and UP203/x2]

The same configuration options as described for the orientation LED are available for the status LED of a device.

The brightness of the status LED can be configured mutually for all status LED and can be influenced via object (e.g. for night

To find a touch sensor when its associated status LFD is turned off and it is dark, this LED may be configured to cyclically flash briefly.

### [仅限 IJP203/x4]

对于不能提供八位场景控制的执行器,借助场景控制器可以实现 场景控制。场景控制支持对最多八条场景通道 (A...H) 进行控 制。每条通道支持从下列功能任选一个:

- 开关控制
- 遮阳控制
- 强制控制
- 八位数值

十六位数值 可以向每条通道指定最多八个不同的场景号码 (1...64)。

短按触摸按键可以回放场景; 长按触摸按键可以保存场景。 保存场景之前,该场景对应的执行器必须设置为合适的亮度和开

只有对触摸开关进行新的配置,即参数"在总线电压恢复后删除场景存储信息"设置为"是"时,才能对保存的场景数值进行删

### 温度测量

### [仅限 UP203/x4]

温度测量值能够被定期发送或在数值发生变更时被发送。通过工 具可以配置固定的偏移量,从而对温度测量值进行校准。

所有的成对触摸按键都预配置成开关功能(上方触摸按键功能为 开启,下方触模按键功能为关闭)。

#### 其他信息

http://www.siemens.com/Gamma

### 技术参数

- 通讨 KNX 总线供由
- 电流消耗:

UP201/xx、UP202/xx、UP203/x2: 10 mA @ DC 24 V UP203/x3、UP203/x4: 12.5 mA @ DC 24 V

总线: 总线端子(黑/红), 无螺丝 直径 0.6...0.8 mm 单股线

# 物理参数

- 尺寸(长x宽x高):86x86x14.6 (mm)
   重量:约65.5 g

# 电气安全

- 污染等级(符合 IEC 60664-1): 2 • 防护类型(符合 EN 60529): IP 20
- 防护级别(符合 IEC 61140): III
- 过电压类别(符合 IEC 60664-1): III
- 总线:安全超低电压 (SELV) DC 24 V
- 设备符合: EN50491-3、IEC 60669-2-1 和 IEC 60669-2-5

符合 EN 50491-5-1、EN 50491-5-2、EN 50428、 EN60669-2-1

- 气候条件: FN 50491-2
- 工作环境温度: -5...45 ℃
   存储环境温度: -20...70 ° C
- 相对湿度(无结露): 5...95 % r.h.

### 标识

KNX FIB CF

### 显示和操作元素的位置和功能

### 图例—图 2

- 上方触摸按键指示 F1
- 状态指示 LED (UP20x/x2 不提供, 熄灭时不可见) E2
- 运行指示 LED
- 编程指示 LED (熄灭时不可见)
- F5 下方触摸按键指示
- 标签 (长: 82±0.15mm, 宽: 18.35±0.1mm, 厚: < 0.2 mm)

Scene controller
[Applies only to UP203/x4]
The scene controller enables integration of those actuators, which themselves do not provide 8-bit scene control, into 8-bit scene control schemes. Up to eight scene channels (A...H) can be controlled. For each channel one of these functions may be selected:

- Switching
- Solar protection control
   Forced control
- 8-bit value
- 16-bit value

Each channel may be assigned to up to eight different scene numbers (1 64)

Scenes are recalled with a short touch area press and saved with a long touch area press. Before saving a scene, the actuators belonging to that scene must

be set to the desired light levels and switching states.

Saved scene values are only deleted by a new configuration of

the device if the parameter "Delete scene memory after bus voltage recovery" is set to "Yes".

# Room temperature measurement [Applies only to UP203/x4]

The room temperature can be sent cyclically or on change of value. For adaptation to local circumstances the measured room temperature can be adjusted by a configurable offset value.

Function ex factory: All touch area pairs are pre-configured for the building site function for switching (upper touch areas on, lower touch areas

#### Additional Information

http://www.siemens.com/Gamma

### **Technical Specifications**

# Power supply • Via the KNX bus line

- Current consumption: UP201/xx, UP202/xx, UP203/x2: 10 mA @ DC 24 V UP203/x3, UP203/x4: 12.5 mA @ DC 24 V

#### Connections

Bus line: Bus terminal (black/red), screwless Ø 0.6 ... Ø 0.8 mm solid

# Physical specifications

- Dimensions (L x W x D): 86 x 86 x 14.6 (in mm)
   Weight: approx. 65.5 g

# Electrical safety

- Degree of pollution (according to IEC 60664-1): 2
- Type of protection (according to EN 60529): IP 20 Class of protection (according to IEC 61140): III
- Overvoltage category (according to IEC 60664-1): III
- Bus: safety extra-low voltage SELV DC 24 V
- Device complies with: EN50491-3, IEC 60669-2-1, and IEC 60669-2-5

# **EMC** requirements

Complies with EN 50491-5-1, EN 50491-5-2, EN 50428, EN60669-2-1

# **Environmental specifications**

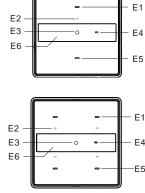
- Climatic conditions: EN 50491-2
   Ambient temperature operating: 5...45 °C
   Ambient temperature non-op.: 20...70 ° C
- Relative humidity (non-condensing): 5...95 % r.h.

Markings KNX, EIB, CE

# Location and Function of the Display and Operating Elements

## Legend for figure 2

- Upper touch area indicator
- LED for status annunciation (not available with UP20x/x2, invisible when turns off)
- LED for orientation lighting
- LED for programming lighting (invisible when turns off)
- Lower touch area indicator Labelling field (length: 82 ± 0.15mm, width: 18.35 ± 0.1mm, thickness: < 0.2 mm)



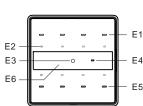


图 2 / Figure 2

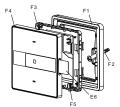


图 3 / Figure 3

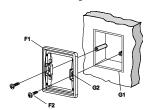
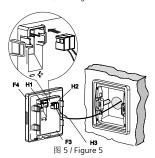
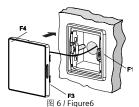
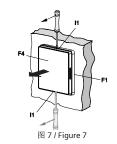


图 4 / Figure 4







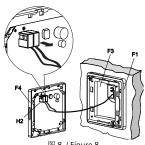
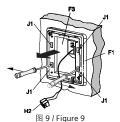


图 8 / Figure 8



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### 安装和接线

### 图例--图 3 至图 9

G2 安装孔 安装框 安装螺丝 Н1 针 KNX 端子 F2 H2 F3 后壳前壳 НЗ KNX 线 螺丝刀孔 F5 编程按钮 11 螺丝刀孔

接线盒 (86 mm X 86 mm)

# 调试

触摸开关需要借助安装框(Gamma arina 系列)安装于接线盒

# 安装

- (参见图 4)
- 对 KNX 端子 (H2) 进行接线。
   将 KNX 端子 (H2) 安装到触摸开关上(参见图 5)。请注意产品外壳上标示的总线连接的极性。
- 将 F3 和 F4 一同安装到安装框上并将其压紧(参见图 6)。

#### 拆卸

- 借助螺丝刀将触摸开关的前壳 (F4) 从后壳上拆除(参见图 7) ,后壳仍然安装于安装框 (F1) 上。 - 用手将 KNX 端子从前壳上拔下(参见图 8)。
- 将螺丝刀插入孔 J1,并按图 9 所示撬开后壳。
- 将后壳从安装框 (F1) 上拆除。
- 将 KNX 端子 (H2) 从后壳拖出。

#### 地址分配

- 按触摸开关的接收匹配按钮 (F5), 开始向设备分配物理地址 (参见图3)
- 编程 LED 灯 (E4) 亮,以指示编程模式开始。设备接收到物理 地址后自动返回正常运行状态, LED 灯熄灭。编程指示 LED 灯 熄灭时不可见。

### 按编程按钮

<2 s: 进入 ETS 调试的编程模式

..<20 s: 进入针对 Desigo TRA 的特殊模式,KNX 编程模式 将被屏蔽约 10 s, 此时编程 LED 灯短促闪烁。

>20s: 设备被重置为出厂默认功能。



# 警告

- 只有授权电工才能安装和调试设备。
- 触摸开关可以与开关插座组合安装于多联安装边框上, 但需 要遵守安全相关的安装标准。
- 电气安装的计划和实施须考虑本国相关规范、规定和标准。

# 常规说明

- 必须向客户提供操作指南。
- 任何故障设备返修, 都必须随附当地西门子办事处返修交付
- 如有任何关于产品的问题, 请联系西门子技术支持。

# 注意:

该产品支持两种运行模式: KNX 和 PL-Link。 本文描述了能够用 ETS 进行配置的 KNX 功能。 关于 PL-Link 信息,请参见 Desigo 文档。

# Mounting and Wiring

### Legend for figures 3 to 9

Labelling field Mounting slots G2 Pin Mounting frame Н1 H2 KNX connector F2 Mounting screws Back housing НЗ KNX line Hole for screwdriver F4 Front housing 11 programing button Hole for screwdriver

G1 Conduit box (86 mm X 86 mm)

# Commissioning

<u>General description</u>
The touch sensor is mounted onto the conduit box together with its mounting frame.

#### Mounting

- Mount the mounting frame (F1) onto conduit box (G1) via mounting slots with mounting screws (F2) (see figure 4),
- Wiring the KNX connector (H2).
- Insert the KNX connector (H2) to the touch sensor (see figure 5). Please be noted the polarity of bus connection with mark on housing.
- Slip the wall switch's main module (F3) together with (F4) onto the mounting frame and firmly press them together (see

- Unmounting Remove the front housing (F4) of the touch sensor apart from the back housing with a screwdriver (see Figure 7), with the back housing still on the mounting frame (F1).
- Pull off the KNX connector manually from the front housing (see Figure 8).
- Insert screwdriver to the holes (J1) and press as showed in Figure 9.
- Move the back housing out of the mounting frame (F1). Pull the KNX connector (H2) out from the back housing.

#### Address assignment

- Press the programing button (F5) on the device to initiate the assignment of the physical address to the device (see figure
- The programming LED (E4) turns on to indicate the programming mode. Upon receiving the physical address, the device automatically returns to normal operating mode and the LED turns off. The programming LED is not invisible when

### Pressing the programming button

<2 s: Programming mode for commissioning with ETS

>2 s...<20 s: Special mode for Desigo TRA. The device may be blocked for the KNX programming mode for approx. 10 s. In this situation the programming LED flashes briefly.
>20s: The device is reset to the factory default settings.



# WARNING

- The device must be mounted and commissioned by an authorised electrician.
- The device can be mounted in combination with switches and sockets in multi mounting frames, but the installation
- should comply with safety standard or regulation. For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

## General Notes

- The operating instructions must be handed over to the client.
- Any faulty device is to be sent together with a return delivery note of the local Siemens office.
- If you have further questions concerning the product, please contact our technical support.

This product supports two different operation modes: KNX and

This document describes the KNX functionality that can be configured with ETS.

For PL-Link refer to documentation for Desigo.