DATASHEET - E57EAL5T111SP



Proximity switch, E57 Miniatur Series, 1 N/O, 3-wire, 10 - 30 V DC, M5 x 1 mm, Sn= 0.8 mm, Flush, PNP, Stainless steel, 2 m connection cable



Part no. E57EAL5T111SP

Catalog No. 136241

Alternate Catalog

E57EAL5T111SP

No.

EL-Nummer 4315392

(Norway)

Delivery program

Product range Connection Connection Design (outer dimensions) Rated operational voltage Rated switching distance Type of mounting Switching type For connection of: Contacts E57 Miniatur Series E57 Miniatur Series 1	Don'tory program			
Connection Connection Design (outer dimensions) Rated operational voltage Ue 10 - 30 V DC Rated switching distance Sn mm 0.8 Type of mounting Switching type For connection of: Contacts 3-wire 3-wire 3-wire 3-wire 3-wire 10 - 30 V DC 10 - 30 V DC PNP PNP 2 m connection cable Contacts	Basic function			Inductive Sensors
Design (outer dimensions) Rated operational voltage Ue 10 - 30 V DC Rated switching distance Sn mm 0.8 Type of mounting Switching type For connection of: Contacts mm M5 x 1 10 - 30 V DC PNP FOR connection cable Type of mounting Flush PNP 2 m connection cable	Product range			E57 Miniatur Series
Rated operational voltage Rated switching distance Sn mm 0.8 Type of mounting Switching type For connection of: Contacts 10 - 30 V DC mm 0.8 Flush PNP 2 m connection cable Contacts	Connection			3-wire
Rated switching distance Sn mm 0.8 Type of mounting Switching type For connection of: Contacts PNP 2 m connection cable	Design (outer dimensions)		mm	M5 x 1
Type of mounting Switching type PNP For connection of: 2 m connection cable Contacts	Rated operational voltage	U _e		10 - 30 V DC
Switching type PNP For connection of: 2 m connection cable Contacts	Rated switching distance	S_n	mm	0.8
For connection of: 2 m connection cable Contacts	Type of mounting			Flush
Contacts	Switching type			PNP
	For connection of:			2 m connection cable
N/O = Normally open	Contacts			
1.72	N/O = Normally open			1 N/0
Material Stainless steel	Material			Stainless steel
Degree of Protection IP67	Degree of Protection			IP67

Technical data

General

Ambient temperature Mechanical shock resistance Mechanical shock resistance Degree of Protection Characteristics Rated switching distance Rated switching distance Repetition accuracy of S _n mm 0.8 Repetition accuracy of S _n 1 Temperature drift of S _n 8 Switching hysteresis of S _n 8 Rated operational voltage Maximum load current in the switched state at 24 V DC Ug 10 Degrating current in the switched state at 24 V DC Ug 15 Switching Frequency Residual current through the load in the blocked state at 230 V AC and 24 V DC Voltage drop at I ₀ 2 Switching State display Protective functions Connection Connection Contacts N/O = Normally open Style Design (outer dimensions) For connection of: Mechanical spinary Mechanical spinary LED Red Short-circuit protective device Short-circuit protective device Short-circuit protective device 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	General			
Mechanical shock resistance Degree of Protection Characteristics Rated switching distance Rated switching distance Repetition accuracy of S _n Temperature drift of S _n Switching hysteresis of S _n Rated operational voltage Maximum load current Operating current in the switched state at 24 V DC Voltage drop at I ₀ Switching frequency Residual current through the load in the blocked state at 230 V AC and 24 V DC Voltage drop at I ₀ Switching state display Protective functions Connection Connection Connection Connection of: We sold a sold duration 11 ms 1967 197 198 198 198 198 198 198 19	Standards			IEC/EN 60947-5
Degree of Protection Characteristics Rated switching distance Rated switching distance Repetition accuracy of Sn Rated spitching distance Repetition accuracy of Sn Repetition	Ambient temperature			-25 - +70
Characteristics Rated switching distance Rated switching distance Repetition accuracy of Sn Temperature drift of Sn Switching hysteresis of Sn Rated operational voltage Maximum load current Operating current in the switched state at 24 V DC Voltage drop at I _e Not I _e Rate doperational voltage Residual current through the load in the blocked state at 230 V AC and 24 V DC I _r MA Ul Voltage drop at I _e Not I _e Not Contacts Not Contacts Voltage drop at I _e	Mechanical shock resistance		g	
Rated switching distance Rated switching distance Repetition accuracy of Sn Temperature drift of Sn Switching hysteresis of Sn Rated operational voltage Maximum load current Ue Ug Voltage drop at Ie Switching Frequency Residual current through the load in the blocked state at 230 V AC and 24 V DC Witching state display Protective functions Connection Connection Contacts N/O = Normally open Style Design (outer dimensions) For connection of: N/O = Normally open Maximum load current intenses witched state at 24 V DC Notage drop at Ie N/O = Normally open Maximum load current through the load in the blocked state at 230 V AC and 24 V DC N/O = Normally open Maximum load current through the load in the blocked state at 230 V AC and 24 V DC N/O = Normally open Maximum load current through the load in the blocked state at 230 V AC and 24 V DC N/O = Normally open Maximum load current through the load in the blocked state at 230 V AC and 24 V DC N/O = Normally open Maximum load current through the load in the blocked state at 230 V AC and 24 V DC N/O = Normally open Maximum load current through the load in the blocked state at 230 V AC and 24 V DC N/O = Normally open Maximum load current through the load in the blocked state at 230 V AC and 24 V DC N/O = Normally open N/O = Normally	Degree of Protection			IP67
Related switching distance Repetition accuracy of Sn Temperature drift of Sn Temperature drift of Sn Switching hysteresis of Sn Rated operational voltage Ue Tensional Voltage drop at Ie Switching Frequency Residual current through the load in the blocked state at 230 V AC and 24 V DC When the switching state display Protective functions Connection Connection Contacts N/O = Normally open Style Design (outer dimensions) Mm Mo 10 10 10 10 10 10 10 10 10 1	Characteristics			
Repetition accuracy of S _n Temperature drift of S _n Switching hysteresis of S _n Rated operational voltage Ve Maximum load current Ue Maximum load current in the switched state at 24 V DC Uperating current in the switched state at 24 V DC Uperating current in the switched state at 24 V DC Uperating current through the load in the blocked state at 230 V AC and 24 V DC Voltage drop at I _e Switching Frequency Residual current through the load in the blocked state at 230 V AC and 24 V DC Verbettive functions Connection Connection Contacts N/O = Normally open Style Design (outer dimensions) mm M5 x 1 For connection of: mm M5 x 1 Zm connection cable	Rated switching distance			
Temperature drift of S _n Switching hysteresis of S _n Rated operational voltage U _e 10 - 30 V DC Maximum load current U _e Maximum load current U _e Maximum load current U _e Maximum load current in the switched state at 24 V DC U _b Maximum load current in the switched state at 24 V DC U _b Maximum load current in the switched state at 24 V DC U _b Maximum load current through the load in the blocked state at 230 V AC and 24 V DC Voltage drop at I _e Switching Frequency Residual current through the load in the blocked state at 230 V AC and 24 V DC I _r Maximum load current through the load in the blocked state at 230 V AC and 24 V DC I _r Maximum load current Maximum load load in the blocked state at 24 V DC Maximum load load in the blocked state at 24 V DC Maximum load load in the blocked state at 24 V DC Maximum load load load in the blocked state at 24 V D	Rated switching distance	S_n	mm	0.8
Switching hysteresis of S _n Rated operational voltage U _e Voltage drop at I _e Voltage dro	Repetition accuracy of S _n		%	1
Rated operational voltage Maximum load current le mA < 200 Operating current in the switched state at 24 V DC	Temperature drift of S _n		%	10
Maximum load current Derating current in the switched state at 24 V DC Derating current in the switched state at 24 V DC Ud Voltage drop at I _e Ud V 1.5 Switching Frequency Residual current through the load in the blocked state at 230 V AC and 24 V DC Switching state display LED Red Protective functions Connection Contacts N/O = Normally open Design (outer dimensions) Max V 1.5 MA 0.01 LED Red Short-circuit protective device 3-wire 1 N/O 1 N/O M5 x 1 Enconnection cable	Switching hysteresis of S_n		%	15
Operating current in the switched state at 24 V DC Ib MA ID Voltage drop at Ie Witching Frequency Residual current through the load in the blocked state at 230 V AC and 24 V DC Residual current through the load in the blocked state at 230 V AC and 24 V DC Ir MA O.01 Switching state display Frotective functions Connection Connection N/0 = Normally open Design (outer dimensions) MB x 1 Fro connection of: MB 000 Ib MB 2000 MB 2000 MB 0.01 LED Red Short-circuit protective device 3-wire 1 N/0 MB x 1 MB x 1 En connection cable	Rated operational voltage	U _e		10 - 30 V DC
Voltage drop at I _e Switching Frequency Residual current through the load in the blocked state at 230 V AC and 24 V DC Switching state display Protective functions Connection Contacts N/O = Normally open Design (outer dimensions) For connection of: Ud V 1.5 Az 2000 Red Bed Short-circuit protective device 3-wire 1 N/O 1 N/O M5 x 1 2 m connection cable	Maximum load current	I _e	mA	< 200
Switching Frequency Residual current through the load in the blocked state at 230 V AC and 24 V DC Ir MA 0.01 Switching state display LED Red Protective functions Connection Connection V/0 = Normally open N/0 = Normally open Design (outer dimensions) For connection of: Hz 2000 Red O.01 Red Short-circuit protective device Short-circuit protective device 1 N/0 N/0 = Normally open 1 N/0 M5 x 1 2 m connection cable	Operating current in the switched state at 24 V DC	I _b	mA	10
Residual current through the load in the blocked state at 230 V AC and 24 V DC Switching state display LED Red Protective functions Connection N/0 = Normally open Ny0 = Normally open Design (outer dimensions) For connection of: MA 0.01 Red Short-circuit protective device 3-wire 1 N/0 1 N/0 M5 x 1 2 m connection cable	Voltage drop at I _e	U_{d}	V	1.5
Switching state display LED Red Protective functions Connection Connection N/O = Normally open Nyo = Normally open Design (outer dimensions) For connection of: LED Red Red Nother Short-circuit protective device 3-wire 1 N/O 1 N/O M5 x 1 2 m connection cable	Switching Frequency		Hz	2000
Protective functions Connection Contacts N/O = Normally open Design (outer dimensions) For connection of: Short-circuit protective device 3-wire 1 N/O 1 N/O Mm M5 x 1 2 m connection cable	Residual current through the load in the blocked state at 230 V AC and 24 V DC	I _r	mA	0.01
Connection 3-wire Contacts 1 N/0 N/0 = Normally open 1 N/0 Style mm M5 x 1 Design (outer dimensions) mm M5 x 1 For connection of: 2 m connection cable	Switching state display		LED	Red
Contacts Image: Contact of the connection of: Image: Contact of the connection of: Image: Contact of the connection of: Image: Contact of the connection of	Protective functions			Short-circuit protective device
N/O = Normally open Style Design (outer dimensions) mm M5 x 1 For connection of: 2 m connection cable	Connection			3-wire
Style Design (outer dimensions) mm M5 x 1 For connection of: 2 m connection cable	Contacts			
Design (outer dimensions) mm M5 x 1 For connection of: 2 m connection cable	N/O = Normally open			1 N/0
For connection of: 2 m connection cable	Style			
	Design (outer dimensions)		mm	M5 x 1
Material Stainless steel	For connection of:			2 m connection cable
	Material			Stainless steel

Design verification as per IEC/EN 61439

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Technical data for design verification		
Operating ambient temperature min.	°C	-25
Operating ambient temperature max.	°C	70

Technical data ETIM 7.0

Sensors (EG000026) / Inductive proximity switch (EC002714)			
Electric engineering, automation, process control engineering / Binary sensor ter (ecl@ss10.0.1-27-27-01-01 [AGZ376015])	chnology, safety-rela	ited se	ensor technology / Proximity switch / Inductive proximity switch
Width sensor	mm	n	0
Height of sensor	mm	n	0
Length of sensor	mm	n	25
Diameter sensor	mm	n	5
Mechanical mounting condition for sensor			Concise
Switching distance	mm	n	0.8
Suitable for safety functions			No
Type of switch function			Normally open contact
Type of switching output			PNP
Type of electric connection			Cable
Number of semiconductor outputs with signalling function			1
Number of contact energized outputs with signalling function			0
Number of protected semiconductor outputs			0
Number of protected contact energized outputs			0
Type of actuation			Metallic Target
Type of interface			None
Type of interface for safety communication			None
Construction type housing			Cylinder, screw-thread
Coating housing			Other
Cascadable			No
Category according to EN 954-1			В
SIL according to IEC 61508			None
Performance level acc. EN ISO 13849-1			None
Max. output current at protected output	mA	4	0
Supply voltage	V		10 - 30
Rated control supply voltage Us at AC 50HZ	V		0 - 0
Rated control supply voltage Us at AC 60HZ	V		0 - 0
Rated control supply voltage Us at DC	V		10 - 30
Voltage type			DC
Switching frequency	Hz		2000
With monitoring function downstream switching devices			No
Material housing			Metal
Compression-resistant			No
Explosion safety category for gas			None
Explosion safety category for dust			None
Interference resistance to magnetic fields			

Approvals

Product Standards	CE marking
Max. Voltage Rating	30 V DC
Degree of Protection	IEC: IP67; UL/CSA Type: -

Dimensions SW8 LED 21 25

Assets (links)

Declaration of CE Conformity 00003158