DATASHEET - RS4-12-Q6



Non-contacting safety switch RS-Titan

Part no. RS4-12-Q6 Catalog No. 177299 Alternate Catalog RS4-12-Q6



Delivery program

Basic function			Position switches Safety position switches
Part group reference			RS
Product range			Non-contacting safety switch
Degree of Protection			IP67, IP69
Ambient temperature		°C	-10 - +55
Description			Reed contacts
Approval			TÜV TÜV Resident Group Type Approved
Contacts			
N/O = Normally open			1 N/0
N/C = Normally closed			2 NC
Rated voltage	U _e	V DC	24
Material			Plastic
Connection type			Connecting cable 150 mm with plug connection M12 x 1
Rated switching distance	S_n	mm	8 - 19

Technical data

General

delicial			
Standards			ISO 13849, ISO 14119, EN 62061
Ambient temperature		°C	-10 - +55
Mechanical shock resistance		g	Semisinusoidal 30 g/11 ms
Vibration			1 mm, 0 - 2000 Hz
relative humidity		%	90 (at 55 °C)
Mounting position			As required
Degree of Protection			IP67, IP69
Terminal capacity			AWG 22
Repetition accuracy (deviation)		%	≦ 10
Power supply			
Rated voltage	U _e	V DC	24
Contacts/switching capacity			
Rated operational current	I _e	Α	
DC-13			
24 V	I _e	Α	0.3
Technical safety parameters:			
Values according to EN ISO 13849-1			
Performance level	PL		е
B10 _d			20000000
Values according to IEC 62061			
			SIL: 3

Design verification as per IEC/EN 61439

Technical data for design verification		
Operating ambient temperature min.	°C	-10
Operating ambient temperature max.	°C	55

Technical data ETIM 5.0

Sensors (EG000026) / Position switch with separate actuator (EC002592)

Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Position switch / Position switch with separate actuator (ecl@ss8-27-27-06-10 [ACN835007])

With status indication Image: Processing Functions Image: Processing Functio	(eci@ss8-2/-2/-06-10 [ACIN83500/])		
Width sensor mm 35 Leight of sensor mm 52 Forced opening Mo 52 Number of safety auxiliary contacts 2 Mo Number of contacts as normally closed contact 2 2 Number of contacts as normally closed contact 3 3 Number of contacts as normally closed contact 4 9 Number of contacts as change-over contact 4 9 Number of contacts as change-over contact 4 9 Rated operation current le at AC-15, 24 V A 0 Rated operation current le at AC-15, 25 V A 0 Rated operation current le at DC-13, 24 V A 0 Rated operation current le at DC-13, 24 V A 0 Rated operation current le at DC-13, 24 V A 0 Rated operation current le at DC-13, 24 V A 0 Rated operation current le at DC-13, 24 V A 0 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 25 V 2 1 Bus	With status indication		No
Height of sensor	Suited for safety functions		Yes
Length of sensor mm 52 Forced opening No No Number of safety auxiliary contacts 2 Number of contacts as normally closed contact 2 Number of contacts as normally open contact 1 Number of contacts as normally open contact 2 Number of contacts as change-over contact 0 Type of switching contact 4 Rated operation current le at AC-15, 24 V A Rated operation current le at AC-15, 25 V A Rated operation current le at AC-15, 230 V A Rated operation current le at DC-13, 24 V A Rated operation current le at DC-13, 230 V A Rated operation current le at DC-13, 230 V A Muerial housing B Construction type housing B Material housing B Mousing according to norm B Construction type housing B Mousing according to norm B Fype of interface for safety communication B Type of interface for safety communication B Type of interface for s	Width sensor	mm	26
Forced opening Number of safety auxiliary contacts Number of contacts as normally closed contact Number of contacts as normally open contact Number of contacts as normally open contact Number of contacts as normally open contact Number of contacts as schange-over contact Number of contacts as change-over contact Number of contacts as normally closed contact Number of contacts as change-over contact Number of contacts as normally closed contact Number of contacts as change-over contact Number of contacts as change-ove	Height of sensor	mm	13
Number of safety auxiliary contacts Number of contacts as normally closed contact Number of contacts as normally open contact Number of contacts as change-over contact Number of contacts Numbe	Length of sensor	mm	52
Number of contacts as normally closed contact 2 Number of contacts as normally open contact 4 1 Number of contacts as change-over contact 6 2 Type of switching contact 6 2 Rated operation current le at AC-15, 24 V A 0 Rated operation current le at AC-15, 125 V A 0 Rated operation current le at DC-13, 24 V A 0.3 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 25 V A 0 Rated operation current le at DC-13, 25 V 0 <t< td=""><td>Forced opening</td><td></td><td>No</td></t<>	Forced opening		No
Number of contacts as normally open contact Number of contacts as change-over contact Type of switching contact Rated operation current le at AC-15, 24 V Rated operation current le at AC-15, 125 V Rated operation current le at AC-15, 230 V Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 25 V A 0 Cuboid Cuboid Material housing Plastic Cuboid Type of interface Type of interface Type of interface Type of interface for safety communication Type of electric connection Plug-in connection M12 Rated operation current le at DC-13, 25 V None Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 25 V Rated operation current le at DC-13, 25 V Rated operation current le at DC-13, 24 V A 0 Cuboid Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 25 V Rated operation current	Number of safety auxiliary contacts		2
Number of contacts as change-over contact Type of switching contact Rated operation current le at AC-15, 24 V Rated operation current le at AC-15, 125 V Rated operation current le at AC-15, 230 V Rated operation current le at CD-13, 24 V Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 25 V Rated operation current le at DC-13, 25 V Rated operation current le at DC-13, 25 V Rated operation current le at DC-13, 220 V Rated operation current le at DC-13, 230 V Rated operation current le at DC-13, 250 V Rated	Number of contacts as normally closed contact		2
Type of switching contact Rated operation current le at AC-15, 24 V Rated operation current le at AC-15, 125 V Rated operation current le at AC-15, 125 V Rated operation current le at AC-15, 230 V Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 230 V Rated operation current le at DC-13, 230 V Rated operation current le at DC-13, 230 V A 0 Rated operation current le at DC-13, 230 V A 0 Construction type housing Construction type housing Material housing Housing coating Type of interface Type of interface Type of interface for safety communication Type of interface for safety communication Type of electric connection Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating C 10-55	Number of contacts as normally open contact		1
Rated operation current le at AC-15, 24 V Rated operation current le at AC-15, 125 V Rated operation current le at AC-15, 230 V Rated operation current le at AC-15, 230 V Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 125 V Rated operation current le at DC-13, 125 V Rated operation current le at DC-13, 230 V Rated operation current le at DC-13, 250 V Rated operation current le	Number of contacts as change-over contact		0
Rated operation current le at AC-15, 125 V A 0 Rated operation current le at AC-15, 230 V A 0 Rated operation current le at DC-13, 24 V A 0.03 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 125 V A 0 Rated operation current le at DC-13, 230 V A 0 Housing according to norm Construction type housing Material housing Housing coating Type of interface Type of interface Type of interface or safety communication Type of electric connection Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating *C construction type housing A construction type housing Plug-in connection M12 None None	Type of switching contact		
Rated operation current le at AC-15, 230 V Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 125 V Rated operation current le at DC-13, 125 V Rated operation current le at DC-13, 230 V Rated operation current le at DC-13, 125 V Rated operation current le	Rated operation current le at AC-15, 24 V	Α	0
Rated operation current le at DC-13, 24 V Rated operation current le at DC-13, 125 V Rated operation current le at DC-13, 230 V Rated operation current le at DC-13, 230 V Rousing according to norm Construction type housing Cuboid Material housing Material housing Housing coating Type of interface Type of interface for safety communication Type of electric connection Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating A 0 Cuboid Cuboid Cuboid Plastic	Rated operation current le at AC-15, 125 V	Α	0
Rated operation current le at DC-13, 125 V Rated operation current le at DC-13, 230 V Housing according to norm Construction type housing Material housing Housing coating Type of interface Type of interface Type of interface for safety communication Type of electric connection Explosion safety category for dust A Definition of the product of the pr	Rated operation current le at AC-15, 230 V	Α	0
Rated operation current le at DC-13, 230 V Housing according to norm Construction type housing Material housing Housing coating Type of interface Type of interface for safety communication Type of electric connection Explosion safety category for dust Ambient temperature during operating A O Cuboid Plastic Plastic - - Plug-in connection M12 None None None None	Rated operation current le at DC-13, 24 V	Α	0.03
Housing according to norm Construction type housing Material housing Housing coating Type of interface Type of electric connection Type of electric connection Explosion safety category for dust Ambient temperature during operating - Cuboid Cuboid Plastic	Rated operation current le at DC-13, 125 V	Α	0
Construction type housing Material housing Housing coating Type of interface Type of interface connection Type of electric connection Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Cuboid Cuboid Cuboid Cuboid Cuboid Plastic Plastic - - Type of Plug-in connection M12 None None None 10 - 55	Rated operation current le at DC-13, 230 V	Α	0
Material housing Housing coating Type of interface Type of interface - Type of electric connection Type of electric connection Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Plastic - Plug-in connection Plug-in connection M12 None None None None 1 0 - 55	Housing according to norm		
Housing coating Type of interface Type of interface for safety communication Type of electric connection Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating - - Plug-in connection M12 None None - None - 10 - 55	Construction type housing		Cuboid
Type of interface Type of interface for safety communication Type of electric connection Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating	Material housing		Plastic
Type of interface for safety communication Type of electric connection Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Plug-in connection M12 None None 10 - 55	Housing coating		
Type of electric connection Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating Plug-in connection M12 None None -10 - 55	Type of interface		
Explosion safety category for gas Explosion safety category for dust Ambient temperature during operating None **C** ** **C** **	Type of interface for safety communication		
Explosion safety category for dust Ambient temperature during operating C None -10 - 55	Type of electric connection		Plug-in connection M12
Ambient temperature during operating °C -10 - 55	Explosion safety category for gas		None
3,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7	Explosion safety category for dust		None
Degree of protection (IP)	Ambient temperature during operating	°C	-10 - 55
	Degree of protection (IP)		IP67

Approvals

Product Standards	CE marking
UL File No.	E166051
UL Category Control No.	NRKH, NRKH7
CSA File No.	UL report applies to both Canada und US
North America Certification	UL listed, certified by UL for use in Canada
Degree of Protection	IEC: IP67, IP69K; UL/CSA Type: -

Dimensions 10.3 mm (0.41") 21mm (0.83") 94.9 mm (3.74") 78 mm (3.07") Ø 4.3 mm (Ø 0.17") **10.3** mm (0.41" 21mm (0.83" 94.9 mm (3.74") 78 mm (3.07") Ø 4.3 mm (Ø 0.17")

Additional product information (links)

IL053002ZU RS-Titan: Reed Switch Titan

IL053002ZU RS-Titan: Reed Switch Titan

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL053002ZU2018_05.pdf