



Rotative axis safety limit switches

Technical data

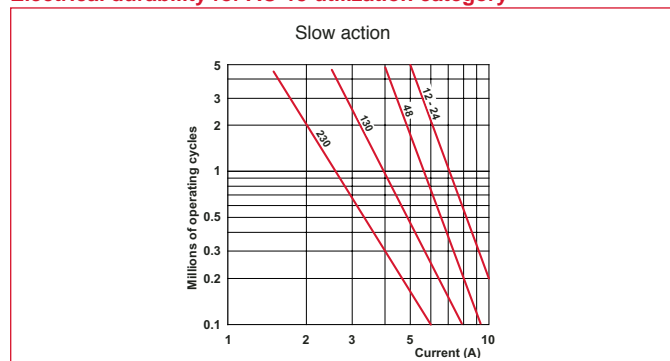
General Data

Standards	IEC 60947-1, IEC 60947-5-1, EN 60947-1, EN 60947-5-1, UL 508, and CSA C22-2 No. 14	
Certifications - Approvals	UL and CSA	
Air temperature near the device	°C	-25 ... +70
– during operation	°C	-30 ... +80
– for storage		
Climatic withstand	According to IEC 68-2-3 and salty mist according to IEC 68-2-11	
Mounting positions	All positions are authorised	
Shock withstand (according to IEC 68-2-27 and EN 60068-2-27) (1/2 sinusoidal shock for 11 ms) no change in contact position	g	Limit switch with small latch (key): 10 g Limit switch with rotative axis or lever: 40 g
Resistance to vibrations	g	5 g (10 ... 500 Hz) no change in position of contacts > 100 μs
Protection against electrical shocks (acc. to IEC 536)	Class II	
Degree of protection (according to IEC 529 and EN 60529)	UL Type 4 & IP65	
Minimum actuation speed	m/s	Slow action contacts 0.060 / Snap action contacts 0.001

9 Electrical Data

Rated insulation voltage U_i – according to IEC 60947-1 and EN 60947-1 – according to UL 508, CSA C22-2 No. 14	V	690 (degree of pollution 3) A600, Q600	
Rated impulse withstand voltage U_{imp} (according to IEC 60947-1 and EN 60947-1)	kV	6	
Conventional free air thermal current I_m (according to IEC 60947-5-1 and EN 60947-5-1) ($0 \leq 40 \text{ }^\circ\text{C}$)	A	10	
Short-circuit protection - gG type fuses	A	10	
Rated operational current			
I_o / AC-15 – acc. to IEC 60947-5-1			
24 V - 50/60 Hz	A	10	
130 V - 50/60 Hz	A	5.5	
230 V - 50/60 Hz	A	3.1	
240 V - 50/60 Hz	A	3	
400 V - 50/60 Hz	A	1.8	
– according to UL 508, CSA C22 No.14		A600	
I_o / DC-13 – acc. to IEC 60947-5-1			
24 V - d.c.	A	2.8	
110 V - d.c.	A	0.6	
250 V - d.c.	A	0.27	
– according to UL 508, CSA C22 No.14	Q600		
Positivity	Contacts with positive opening operation as per IEC 60947-5-1 chapter 3 and EN 60947-5-1		
Resistance between contacts	mΩ	25	
Mechanical durability	Millions of operations	> 1 million of operating cycles	
Max. switching frequency	Cycles/h	600	
Electrical durability (according to IEC 60947-5-1 appendice C)	Utilization categories AC-15 and DC-13 (see curves and values below)		
– Max. switching frequency	Cycles/h	3600	
– Load factor		0.5	

Electrical durability for AC-15 utilization category



Electrical durability for DC-13 utilization category

Slow action Power breaking for a durability of 5 million operating cycles		
Voltage	24 V	12 W
Voltage	48 V	9 W
Voltage	110 V	6 W