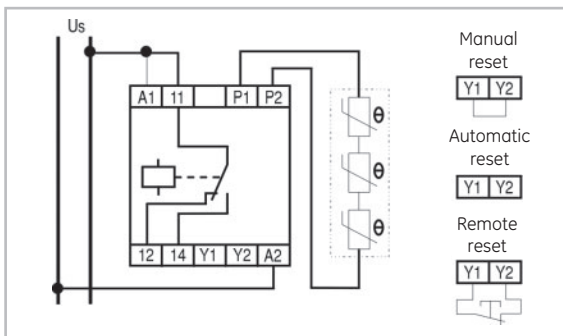## RS01N   Thermistor relay
Function

This thermal probe relay is sensitive to resistance of several thermal probes (thermistors, PTC) connected to **P1** and **P2** and detect overheating in motor windings transformers, etc. where these PTC are connected.

The relays disconnects when probe resistance exceeds 2500 ohms and cannot reset until resistance is lower than 1500 ohms. Control voltage should be applied to **A1** and **A2**, the absence of this will cause relay to trip and prevent any possibility remaining without protection. In this case resetting is automatic, but if the relay trips through probe heating, resetting may be automatic, hand or remote (distance NC contact).

RS01N detect those cases of probe cables short-circuited (resistance lower than 20 Ohms) or probe cables cut (resistance higher than 2.5k Ohms). The resistance at 25 °C of the probe circuit must be within 40 to 600 ohms range.

Technical characteristics

			RS01N
Nr. of changeover contacts			1
Output contacts:			
Rated insulation	AC	(V)	400
voltage Ui	DC	(V)	250
Thermal current Ith		(A)	6
Utilisation AC-15			
Rated voltage Ue		(V)	120/240
Rated current Ie		(A)	2.5/1.3
Utilisation DC-13			
Rated voltage Ue		(V)	110/220
Rated current Ie		(A)	0.2/0.1
Supply voltages		(Un)	
AC (with transformer)		(V)	220-230,125,110
Frequency		(Hz)	50/60
Permissible supply voltage variation (%)			+10 / -15
Repeat accuracy with 0.85-1.1 Un (%)			2
Consumption		(VA)	3
Input circuit test voltage		(kV)	4
(between input, output circuit and earth)			
Switch OFF response time		(s)	100
Hysteresis		(kOhms)	1
Probe resistance min. (at 25°C) (Ohms)			40
Probe resistancemax. (at 25°C) (Ohms)			600
Max. voltage in terminals P1-P2 (R=2.5kV)(V)			< 1,6

Ambient conditions

Storage temperature	-10°C to +85°C
Operating temperature	-5°C to +50°C
Relative humidity	95%
	(without condensation)
Altitude	2.000 m
Degree of protection	IP40; terminals IP20
Operating positions	Any

Conformity to standards

VDE 0106	IEC/EN 60947-5-1
EN 50001	IEC 34-11-2 (RS01N)
EN 50005	UNE 20-119
EN 50011	CE
DIN VDE 0660-303 (RS01N)	
DIN 46199 (RSR)	

Remark

The relay has one LED that lights when the output contact is made.