# Monitoring Relays 1-Phase AC Over Current Type DIA53





- · 2-wire connection
- Self-powered
- Input ranges: 2 20 AAC, 5 50 AAC or 10 100 AAC
- Knob-adjustable set-point
- Output: Normally open, 100 mA
- · LED indication for output ON
- For mounting on DIN-rail in accordance with DIN/EN 50 022
- 17.5 mm DIN-rail housing (DIN 43880)

### **Product Description**

Small current monitoring relay with built-in current transformer with adjustable setpoint and integrated solid state output. Self-powered and 2-wire connection for easy use.

12 mm hole for insulated current carrying wire makes it suitable for most applications. For mounting on DIN-rail.
17.5 mm wide housing suitable both for back and front panel mounting.

# Ordering Key DIA 53 S 724 20A F Housing Function Type Item number Output Power supply Input range Version

### **Type Selection**

Input current	Reaction time	Type no.	
2 - 20 AAC 5 - 50 AAC 10 - 100 AAC 2 - 20 AAC 5 - 50 AAC 10 - 100 AAC	Standard Standard Standard Fast Fast Fast Fast	DIA53 S724 20A DIA53 S724 50A DIA53 S724 100A DIA53 S724 20A F DIA53 S724 50A F DIA53 S724 100A F	

### **Output Specifications**

Output	NPN-PNP open collector, NO	
Output current Maximum load current	100 mA	
Leakage current	≤ 100 µA	
Max. voltage	40 VDC	
Voltage drop (U <sub>d</sub> )	< 2.5 VDC	

### **Input Specifications**

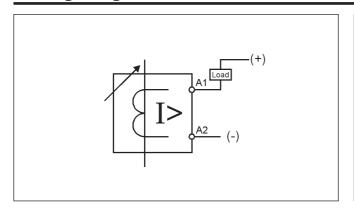
	DIA53 S 724 20A	DIA53 S 724 50A	DIA53 S 724 100A
Current range	2 - 20 AAC @ 50 Hz	5 - 50 AAC @ 50 Hz	10 - 100 AAC @ 50 Hz
Max. current (continuously)	40 AAC	100 AAC	150 AAC
Max. overload current (t = 30 s)	200 AAC	200 AAC	200 AAC

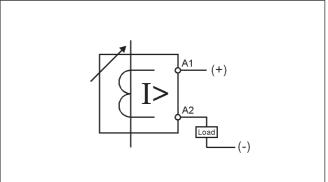
### **General Specifications**

Reaction time DIA53	< 300 ms (input signal variation from -20% to +20% of set value)	Environment Degree of protection Pollution degree Operating temperature	IP 20 3 -20 to +60°C
DIA53F	< 50 ms	Weight	80 g
	(input signal variation from -20% to +20% of set value)	Screw terminals Tightening torque	Max. 0.5 Nm
Repeatability	0.5 %		acc. to IEC 60947
Hysteresis		Housing dimensions	17.5x81x67.2 mm
(Differential travel)	7 - 13% of setpoint	Approval	UL, CSA
Frequency range	45 - 400 Hz	CE Marking	Yes
Temperature variation	±0.20%/°C of setpoint	EMC Immunity Emission	Electromagnetic Compatibility According to EN 61000-6-2 According to EN 61000-6-3

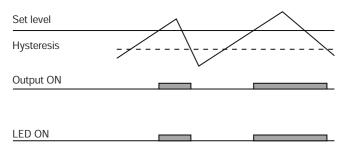


# **Wiring Diagrams**





# **Operation Diagram**



### **Dimensions**

