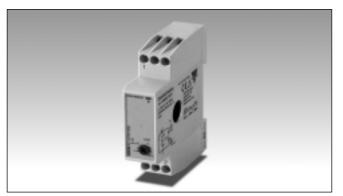
# Monitoring Relays 1-Phase AC Over Current Type DIA53





- · 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 Housing Function Type Item number Output Power supply Input range Version DIA 53 S 724 20A F

#### **Type Selection**

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

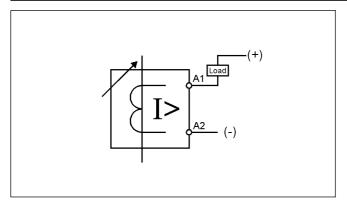
	DIA53 S 724 20A	DIA53 S 724 50A	DIA53 S 724 100A
Current range	2 - 20 AAC @ 50 Hz	5 - 50 AAC @ 50 Hz	10 - 100 AAC @ 50 Hz
Max. current (continuously)	40 AAC	100 AAC	150 AAC
Max. overload current (t = 30 s)	200 AAC	200 AAC	200 AAC

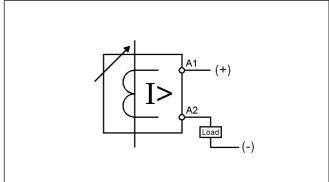
## **General Specifications**

Reaction time		Environment	
DIA53	< 300 ms	Degree of protection	IP 20
	(input signal variation from	Pollution degree	3
	-20% to +20% of set value)	Operating temperature	-20 to +60°C
DIA53F	< 50 ms	Weight	80 g
	(input signal variation from	Screw terminals	
	-20% to +20% of set value)	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	Electromagnetic Compatibillity
		Immunity	According to EN 61000-6-2
		Emission	According to EN 61000-6-3
			G

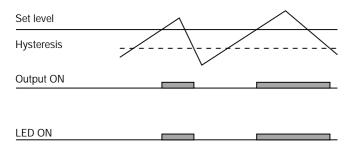


# **Wiring Diagrams**





# **Operation Diagram**



#### **Dimensions**

