

# Monitoring Relays

## 1-Phase AC Over Current

### Type DIA53

CARLO GAVAZZI



- 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 set-point 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	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

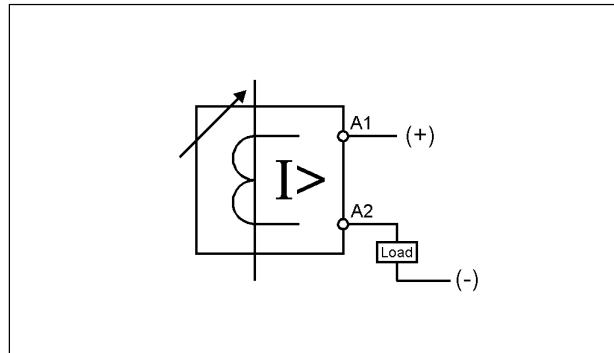
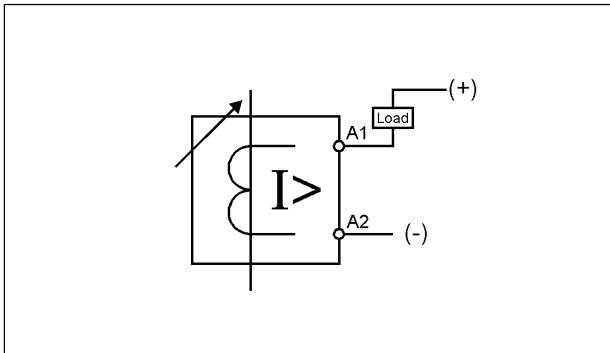
### Input Specifications

	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

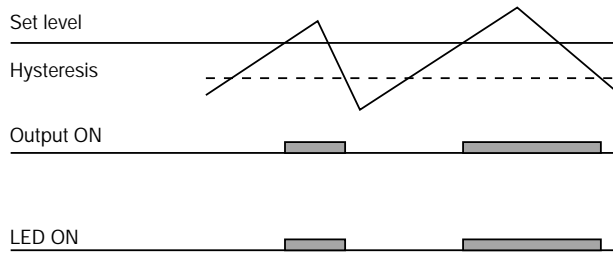
### General Specifications

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

## Wiring Diagrams



## Operation Diagram



## Dimensions

