

# Monitoring Relays 1-Phase AC Over Current Type DIA53

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- 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	<b>DIA53 S724 20A</b>
5 - 50 AAC	Standard	<b>DIA53 S724 50A</b>
10 - 100 AAC	Standard	<b>DIA53 S724 100A</b>
2 - 20 AAC	Fast	<b>DIA53 S724 20A F</b>
5 - 50 AAC	Fast	<b>DIA53 S724 50A F</b>
10 - 100 AAC	Fast	<b>DIA53 S724 100A F</b>

## 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

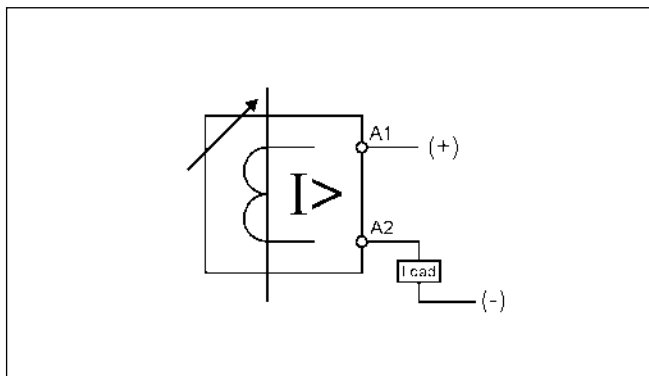
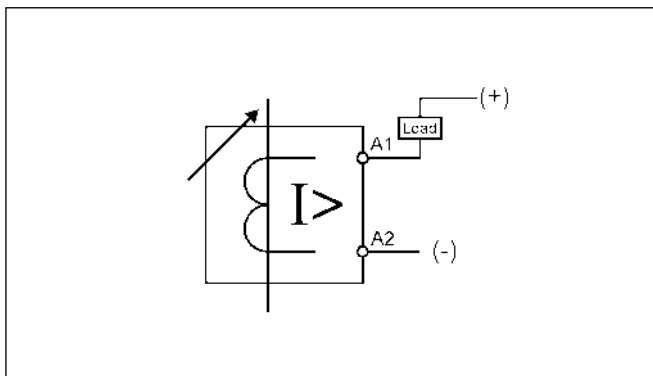
## Input Specifications

	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

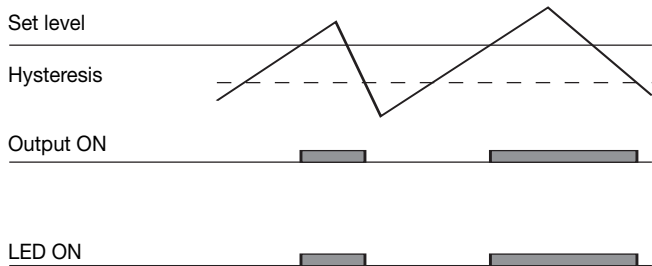
## General Specifications

Reaction time DIA53	< 300 ms (input signal variation from -20% to +20% of set value)	Weight	80 g
DIA53...F	< 50 ms (input signal variation from -20% to +20% of set value)	Screw terminals Tightening torque	Max. 0.5 Nm acc. to IEC 60947
Repeatability	0.5 %	Housing Dimensions Material	17.5 x 81 x 67.2 mm PA66 or Noryl
Hysteresis (Differential travel)	7 - 13% of setpoint	Product standard	EN 60255-6
Frequency range	45 - 400 Hz	Approval	UL, CSA
Temperature variation	±0.20%/°C of setpoint	CE Marking	L.V. Directive 2006/95/EC EMC Directive 2004/108/EC
Environment Degree of protection	IP 20	EMC Immunity	According to EN 60255-26 According to EN 61000-6-2
Pollution degree	3	Emissions	According to EN 60255-26 According to EN 61000-6-3
Operating temperature	-20 to +60°C		

## Wiring Diagrams



## Operation Diagram



## Dimensions

