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Adaptation unit Tina 3A/Aps



Approvals:



TÜV NORD



Application:

 Adaptation of mechanical positive forced disconnecting contacts to the dynamic safety circuit.

Example:

- Emergency stops
- Switches
- Light beams / light curtains with relay outputs

Features:

- Simplifies the system as well as maintaining the safety level
- Indication of status by LED

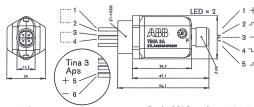
Technical data - Tina 3A

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Article number	
Tina 3A	2TLA020054R0200
Tina 3Aps	2TLA020054R1400
Level of safety IEC/EN 61508-17 EN 62061 EN ISO 13849-1 PFH _E	SIL3 SIL3 PL e/Cat. 4 4.50 × 10 ⁹
Power supply Operating voltage Total current consumption Time delay t (in/out)	24 VDC + +15%, -25% 47 mA (57 mA with max information output) Information output: Max 10 mA t < 70 us
Current through safety device contacts Short circuit current between	12 mA
contacts Voltage supply at normal operation (protection OK) and 24 VDC supply voltage	10 mA Dynamic input: between 9 and 13 volt (RMS) Dynamic output: between 9 and 13 volt (RMS) Information output: ~ 23 VDC
Protection class	IP67
Ambient temperature	Storage: -30+70°C
	Operation: -10+55°C
Humidity range	35 to 85 % (with no icing or condensation)
Housing material	Based on polyamide, Macromelt OM646 (V0)
Connectors	M12 5-pole connector
	Green loop wires (A1 & A2)
	Orange loop wires (B1 & B2)
	Brown (+24 VDC), Blue (0 VDC) wires
	(Tina 3Aps only)
Size	54 × 24 × 24 mm (L x W x H)
Weight	~30 g
Golour	Black
Approved standards	European Machinery Directive 2006/42/EC, EN ISO 12100 1:2003, EN ISO 12100-2:2003, EN 60204- 1:2007, EN ISO 13849-1:2008,
	EN 62061:2005

Description

Tina 3A/Aps is a device that adapts the safety sensors with mechanical positive forced disconnecting contacts, such as emergency stops, switches and light curtains/light grids with their own relay outputs to the dynamic safety loop.

Both Tina 3A and Tina 3Aps are fitted with M20 contacts which simplifies connection to safety sensors prepared for M20 connection. The devices are then easily connected to the dynamic safety loop through a 5-pin M12 contact to the Tina device. Tina 3Aps has an extra conductor for the supply voltage to the safety sensor.



Cable connection:

- 1. Safety circuit A1-A2
- 2. Safety circuit A1-A2
- 3. Safety circuit B1-B2
- 4. Safety circuit B1-B2
- 5. Brown: +24 VDC (only Tina 3 Aps)
- 6. Blue: 0 VDC (only Tina 3Aps)
- 5-pin M12 male contact:
- 1. +24 VDC
- 2. Dynamic input signal
- 3. 0 VDC
- 4. Dynamic output signal
- 5. Not used