# **VARES** LCOP

## TRT-200 A RINGBUS ISOLATOR



Compatible with:

**UQRES**-**₹**1500

VARE5-7+2000

UORF5-≪-3NNN













The VARES-LOOP – Ringbus Isolator Module is the successor in our range of loudspeaker loop-isolator devices that are using our patent technology to deliver a higher level of security of evacuation loudspeaker lines that are installed according to the return-loop principle.

A loudspeaker failure in a faulty section between any two TRT-200 A's in the loop is automatically detected and isolated in order to ensure maximum availability of the remaining loudspeakers on that same loop. The Ringbus Isolator Module protects the loop integrity against any wire-to-wire short circuit and detects open line on T-Branch.

# RC5

#### RINGBUS ISOLATOR VARES LOOP

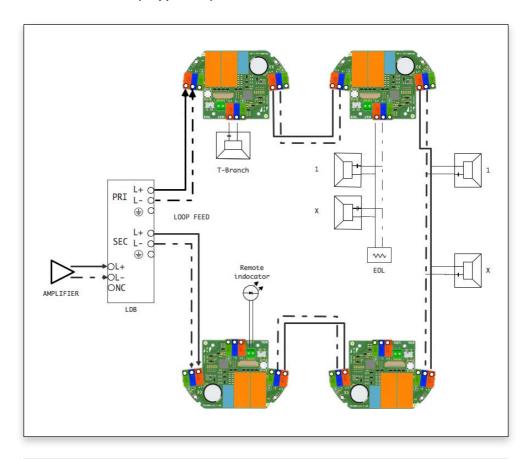
The TRT-200 A is equipped with clearly market connectors. It has a LOOP-FEED and LOOP-RETURN connection that are not sensitive for feeding direction. LOOP has a DC-carrier for charging and communication purpose.

Please observe correct connectivity:

RED = PHASE / PLUS

**BLUE = ZERO / MINUS** 

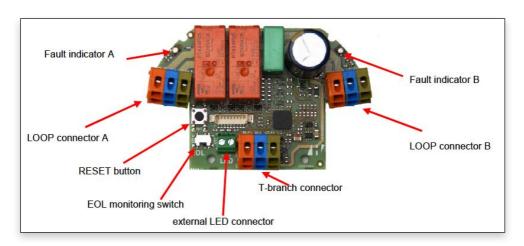
**GREEN = GROUND (If applicable)** 



**NOTE:** The maximum number of loudspeakers between TRT-200 A's is not limited within the maximum LOOP-load of 800W, however, national standards may limit the amount of loudspeakers between Isolators. Earth connector is available for optional earth-wire loop detection.

#### **UARES FLOOP** RINGBUS ISOLATOR

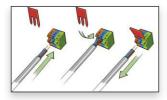




The TRT-200A is equipped with a power capacitor that is charged by the LDB and has enough capacity to run at least two measurement cycles without the need for re-charging. The LED indicator(s) on the TRT-200A are flashing with intervals to indicate quiescent or fault condition. The TRT-200A has a RESET button and EOL-enable switch. Please refer to the User and Installation manual for detailed information.

The maximum number of loudspeakers between any two TRT-200 A's is restricted by the maximum loop-load of 800W. National standards might call for restrictions. The T-Branch has a load limit of 50W. If multiple loudspeakers are connected to the T-branch, the EOL switch need to be set on: ENABLE and a EOL resistor has to be applied.

The TRT-200 A has two indicators that are related to the status of either LOOP-A or LOOP-B side (Loop feed). If both indicators are flashing alternately, the fault information is related to the T-Branch status. Please refer to the User and Installation manual for detailed information on the various indications of these indicators.





The TRT-400A is equipped with WAGO push-terminals that accept up to 2,5 mm<sup>2</sup> core installation cable. A special tool is provided to quickly remove all three wires in one run. (Release-tool is included)



### RINGBUS ISOLATOR VARES → LCOP

Technical data	TRC-200 A
Electrical	
DC Power supply (from LDB)	19 - 30 VDC, nominal 30 VDC
DC Power consumption	
Idle current	100 μA continious
Max. power consumption	20mW
LOOP connection	
DC	30V
AC Voltage	100Vrms
Max. AC load	800W
AC Frequency range	40Hz - 20kHz (-3dB)
T-Branch output	50W / EOL = 47kOhm / 0,25W or higher
Wiring	2-wire. Max. 2,5mm2 / Max. Loop length: 1000m
Grounding	optional earth loop through third connection pin
Loop relay contact rating	max. 250VAC / 8A (Dual state type)
Loudspeaker type	only with DC-blocking capacitor
Maximum # of loudspeakers	
Between two TRT's	Infinite within the maximum loop-load of 800W
Detween two TRT'S	(National standard may limit the number of loudspeakers between TRT's)
T-branch	Infinite within the maximum T-branch load of 50W
	(National standard may limit the number of loudspeakers)
Detection	Short, wire-to-wire / Open T-Branch / Earth leakage T-Branch
Mechanical	
Housing	PP plastic with transparent cover
Dimensions (WxHxD)	IP 21 housing, 110 x 130 x 55 mm (Basic)
	IP 33 extension included. 110 x 180 x 55 mm (Optional)
Ordering information. Part No.	
TRT-200A	1x IP21 housing with transparent cover and PCB
	1 x release tool
	1 x compression gland for speaker mounting
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Certification and Approvals	
Complies with	EN54-17:2005 - 0560-CPR-142190002
European patent	EP 0967833B1