

SERGI CONSERVATOR SHUTTER Type TL



SERGI
TRANSFORMER PROTECTOR

Essential fire protection for transformer safety



Prevent conservator oil spilling and feeding fire at the initial critical stage of the fire.

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Description

When a transformer is under normal operation, the SERGI CONSERVATOR SHUTTER Type TL is open, enabling oil volume expansion and retraction from the conservator.

When the SERGI CONSERVATOR SHUTTER Type TL detects an abnormal high oil flow, it quickly and effectively isolates the conservator by mechanically closing the flap and initialing an alarm (Normally Open contact switch). Thanks to the SERGI CONSERVATOR SHUTTER Type TL, the oil is prevented from spilling out through ruptured transformer.

In the event of transformer explosion and fire, the SERGI CONSERVATOR SHUTTER Type TL prevents the oil from the conservator to fuel the fire at the early and critical stage of the fire.

Solution recommended by experts

“Conservators tend to be undamaged when tanks are ruptured. However, insulating fluid flowing back from the conservator into a ruptured tank can be controlled by installing a shutter or a flow-rate-dependent check valve in the conservator piping. Even though conservators contain a small percentage of the total insulating fluid, the continuous back flow can prolong an active fire for a significant period after insulating fluid from the main tank has ceased to flow.”¹

Conditions of use

Installation	<ul style="list-style-type: none">Indoor and outdoor.
Ambient temperature	<ul style="list-style-type: none">From -40°C (-40°F) up to 80°C (176°F)For cold weather areas, it is considered that the transformer oil never reaches its freezing point.
Altitude	<ul style="list-style-type: none">Up to 5000 m above sea level.
Area	<ul style="list-style-type: none">Low Seismic Hazard zone up to High Seismic Hazard
ATEX Zone	<ul style="list-style-type: none">Standard SERGI CONSERVATOR SHUTTER is not to be used in ATEX classified zone, but ATEX zone options are available.

¹ "IEEE Guide for Tank Rupture Mitigation of Liquid-Immersed Power Transformers and Reactors," in IEEE Std C57.156-2016, 21 Dec. 2016

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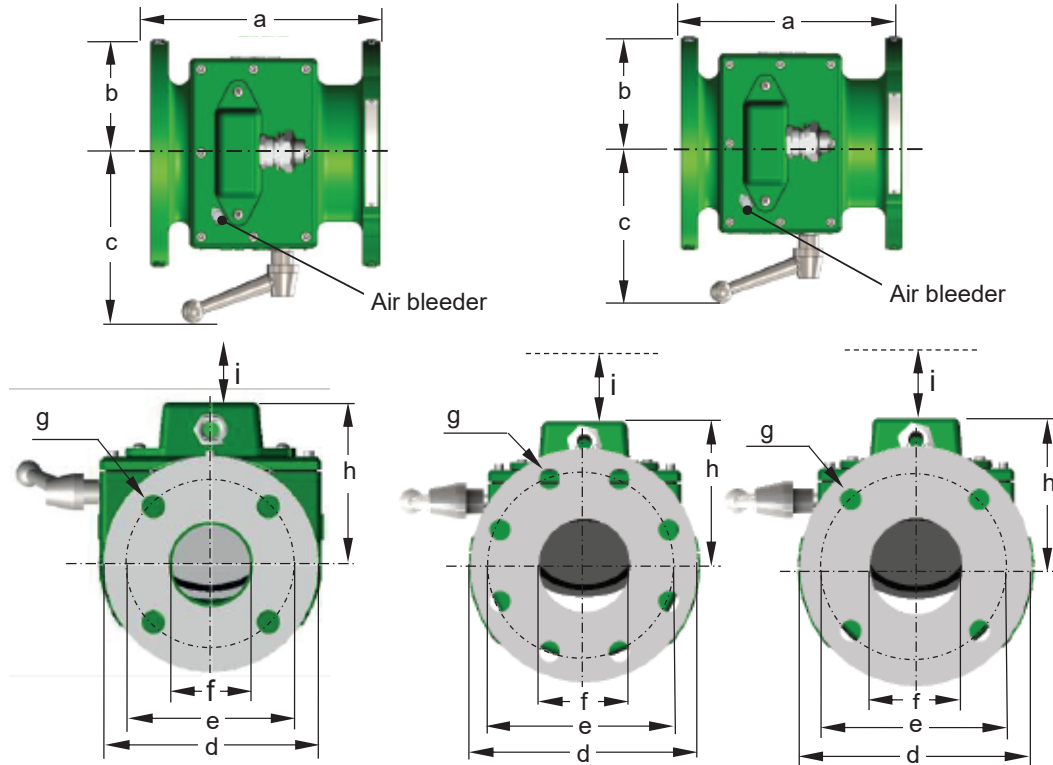
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Model	TL24-4
Part Number	11 16 260 0050 0007

Top and Side View

TL34-8 (standard)	TL34-4 (upon request)
11 16 261 0080 0007	11 16 261 0080 0009

Top and Side View



Types	Conservator Pipe Diameter	a	b	c	d	e	f	g	h	i
TL24-4	DN 50 (2-inch)	210.5 (8.3)	85 (3.3)	158 (6.2)	165 (6.5)	125 (4.9)	60 (2.4)	4 x Ø18 (4 x Ø0.71)	127 (5.0)	30 (1.2)
TL34-8	DN 80 (3-inch)	210.5 (8.3)	100 (3.9)	158 (6.2)	200 (7.9)	160 (6.3)	80 (3.15)	8 x Ø18 (8 x Ø0.71)	127 (5.0)	30 (1.2)
TL34-4	DN 80 (3-inch)	210.5 (8.3)	100 (3.9)	158 (6.2)	200 (7.9)	160 (6.3)	80 (3.15)	4 x Ø18 (4 x Ø0.71)	127 (5.0)	30 (1.2)

Dimensions in mm (inch); i = free distance to open terminal cover

Electrical Characteristics

Reed Switch with Normally Open (NO) Dry Contact.

- Maximum Carrying Current 1 A
- Maximum Switching Voltage 250 V
- Maximum Switching Current 400 mA
- Maximum Switching Power 10 W

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Dimensions

CONSERVATOR SHUTTER Type TL is supplied with gaskets.

- TL24-4, designed to fit DN50 (2-inch) pipe
- TL34-8, designed to fit DN80 (3-inch) pipe, 8 holes – standard
- TL34-4, designed to fit DN80 (3-inch) pipe, 4 holes – on request

Order form

Reference

TL24-4	x
TL34-8	x
TL34-4	x

Options

Flanges and Hardware

Dielectric fluid

Cold weather down to -50°C

Logistics options

Incoterm 2020

Delivery Address



End-user:

Customer ref.:

For specific requirements, please contact us.



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Contact us



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