Wega T1

For insulated medium-voltage transformers

PRODUCT FEATURES

- Voltage display system, designed according to IEC 62271-213:2021 and IEC 61243-5
- Continuous LCD indication: 3-phase
- Suitable for Euromold elbow connectors (K) 158 LR, (K) 152 SR and M 400 LR / G as well as Pfisterer MSCE 250 A with capacitive test points
- Integrated maintenance test: maintenance-free

The Wega T1 is a 3-phase voltage detector for insulated medium voltage transformers safe for touching. It is installed in a surface mount housing for applications in new and existing transformer stations. Besides conventional medium voltage transformers, these types are in particular ideally suited for insulated medium voltage transformers, or in transformer stations / buildings with more than one transformer.

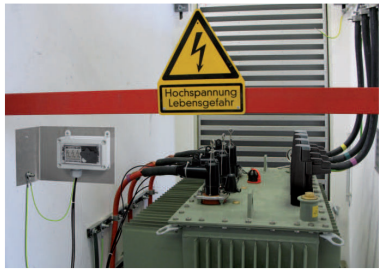
The built-in display test function at the front enables verification of the display of the installed and de-energised unit.

The test points are not suitable for an LRM phase comparator due to the weak capacitive coupling which is associated with the specific application of the devices.

Wega T1 is a three-phase voltage detecting system that indicates subsequent medium voltage conditions:

- Voltage present
  Threshold values for voltage presence indication: 0.1 — 0.45 x Vnom
- Voltage present
  Integrated maintenance test passed
- Voltage present
  Integrated maintenance test passed
  Voltage signal too high (overvoltage indication)
- Voltage not present

Front view



Example of installation

Technical data	Wega T1
Nominal voltage	1 — 52 kV (nominal voltage of transformer, further values on request)
Nominal frequency	50 — 60 Hz
Interface	Test points (1 per phase) and one earth socket, with captive anti-dust cap
Indication	LCD display with arrow, dot and wrench tool
Power supply	▸ No auxiliary supply needed ▸ LCD display: fed by measuring voltage
Housing	Polycarbonate, IP54
Temperature range	–25 °C to +65 °C

Euromold

Connector type	Voltage range	Order nr.*
(K) 152 SR / (K) 158 LR / M 400 LR/G	6 — 12 kV	V51-1251-001-301
(K) 152 SR / (K) 158 LR / M 400 LR/G	10 — 20 kV	V51-1251-001-302
(K) 152 SR / (K) 158 LR / M 400 LR/G	20 — 36 kV	V51-1251-001-303

Connector type	Voltage range	Order nr.*
Cellpack CGS 250 A Cellpack CWS 250 A	10 — 15 kV 16 — 24 kV	V51-1252-001-001
Nexans/Euromold (K)200LR/G/V Nexans/Euromold (K)200SR/G/V	6 — 10 kV 10 — 15 kV 15 — 24 kV	
TE/Raychem RSES-VD-525x	8 — 15 kV	
TE/Raychem RSSS-VD-525x	12 — 24 kV	

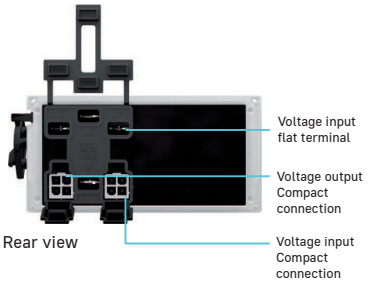
* Incl. wall-mounted housing, coaxial cable and earthing cable

Dimension drawing see on page 132 ff | M14

Wega 1 LV

Integrated voltage detecting system for low-voltage applications

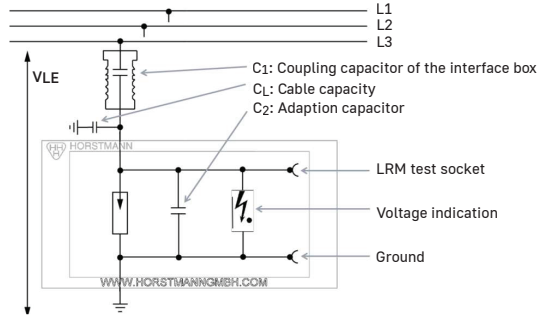
Front view



Rear view

PRODUCT FEATURES

- According to the current IEC 62271-213:2021 standard
- Tool-free assembly and disassembly: saves time
- Integrated maintenance test: maintenance-free
- Retrofit ready: capacitive connection to ComPass B and Sigma D series
- Fully encapsulated electronics: high functional reliability
- Extended temperature range from -40°C to +75°C: increased application possibilities
- High display contrast: improved readability
- Overvoltage display: phase-selective
- LRM interface on the front: fully compliant with IEC 62271-213:2021



Principle of an integrated voltage detecting system for low-voltage applications

Wega 1 LV is a three-phase voltage detecting system that indicates low-voltage conditions:

	Voltage present Threshold value for voltage presence indication: 50 V
	Voltage present Integrated maintenance test passed
	Voltage not present

The Wega 1 LV is an integrated voltage indication system. The device is used to determine and display the operating status of three-phase low-voltage systems (without neutral conductor) in accordance with IEC 62271-213. The Wega 1 LV is based on the requirements for voltage detection and indication systems (VDIS) in accordance with IEC 62271-213, with the exception that IEC 62271-213 applies to rated voltages greater than 1 kV and that the Wega 1 LV has been designed accordingly for low voltage. The Wega 1 LV may only be operated as a complete system in combination with the interface box included in the set and the corresponding connection cable. The display test function built into the front of the device enables the display to be tested in the installed and de-energised state.

Dimension drawing see on page 27ff | M13

Technical data	Wega 1 LV
Nominal voltage	400 – 700 V (nominal voltage of switchgear, further values on request)
Nominal frequency	50 Hz
Interface	▸ 3 LRM measuring sockets (one per phase) and 1 earth socket ▸ LRM system, 14 mm distance between sockets, with captive anti-dust cap
Indication	LCD display with arrow, dot and wrench tool
Power supply	▸ No auxiliary supply needed ▸ LCD display: fed by measuring voltage
Input/ Output	Input: flat terminal or compact connection (AMP) | Output: compact connection (AMP)
Housing	Polycarbonate, IP54
Temperature range	–40 °C to +75 °C