CAPDIS-PI (R4)

Voltage Detection System (VDS) for retrofitting



VDS for retrofitting of medium voltage switchgears

Transformation of HR or LRM interfaces to integrated voltage detection systems acc. IEC 61243-5

Retrofit without interfering the switchgear

Retrofitting of all HR and LRM interfaces acc. IEC 61243-5 possible

CAPDIS-PI-Retrofit for retrofitting of aged interfaces ,

whose electrical values are not acc. IEC 61243-5 anymore

No battery

Voltage detection and self-test without auxiliary power or battery

Free of maintenance

Isolation monitoring of C1 at primary side of capacitive divider

Early warning of isolation problems at primary C1 capacity

Integrated self-test

For voltage detection no additional counter check is neccessary Self test acc. Patent DE103 04 396

Integrated three-phase measurement interface

LR interface for phase comparison and rotary field detection integrated

Optional interface to fault detector "Grid-Inspector IKI-50"

Can be used for voltage measurement of primary voltage without PTs.







before: HR-interface

- Maintenance test required
- Voltage detection only with counter check



Installation: 1 min.



after: CAPDIS-PI-HR

- No maintenance
- Integrated self-test
- Longer lifespan





CAPDIS-PI (R4)

Voltage Detecion System (VDS) for retrofitting



Technical data

Applied norm: IEC 61243-5

LCD indications:

Indica ion LCD	Indica ion du ing no mal ope a ion wi h		Indica ion du ing b inging in o se vice	Indica ion wi h
	nominal voi age	Explana ion	wi h nominal vol age	p essed es bu on
F	Ove vol age	Is ati n pr b em at primary part f divider r U >> 1,2xUn	C2m < Min.	Capdis o.k.
4	Nominal vol age p esen	Signal ok Isola ion ok U > 0,45xUn	C2m co ec	interna err r
4	Vol age p esen	Is ati n pr b em at sec ndary part f divider 0,1xUn < U < 0,45xUn	C2m > Max.	interna err r
No indica ion	No vol age	Sh rt-circuit at c nnecting eads U < 0,1xUn	C2m >> Max.	interna err r

Requirements: HR or LRM interface at switchgear

Measurement interface: LR at front of CAPDIS-PI

Housing: Plastic

Dimensions: hxwxd = 52x111x38 mm

Protection degree: IP 54

Self-Test: via self-test button

(without battery or auxiliary power)

Phase comparison: via LR or LRM phase comparators acc. IEC 61243-5 (e.g. CAP-Phase)

VERSIONS

CAPDIS-PI-HR(R4) for HR-interface: Item-No.: 2501382
CAPDIS-PI-LRM(R4) für LRM-interfaces: Item-No.: 2501383
CAPDIS-PI-RR4 Retrofit: Item-No.: 2501384

CAPDIS-PI-RR4 Retrofit can be used as voltage sensor for directional fault detection via "Grid-Inspector IKI-50" or to retrofit HR interfaces whose electrical values are not acc. IEC 61243-5 anymore.



before: maintenance check current below 3,2uA



Retrofit: 10 Min.



after: Voltage detecion system fully conformance to IEC 61243-5 with voltage interface to IKI-50