

ZIV SAS

Substation Automation Systems



P&C IEDs, RTUs, COMMUNICATIONS, SYSTEMS & SW



SUBSTATION AUTOMATION SYSTEMS

P&C IEDs, RTUs, COMMUNICATIONS, SYSTEMS & SW

ZIV e-NET
FLEX family
suite:
all protection
functions

ZIV IRL

**Compact Feeder Multifunction
solution for MV switchgear,**
with Load Shedding Function to
ensure the stability of the system,
Back-Up performing capability in HV
lines and powerful built-in Control
Logic Module.

New brochure: [HFLEX2410lv00](#)



ZIV IRS

Self-powered
Overcurrent and Breaker
Failure Protection Relay
with Harmonic Blocking



WHAT'S NEW

DBF: DISTRIBUTED BUSBAR DIFFERENTIAL PROTECTION WITH PROCESS BUS



- Based on the latest standards for **Process Bus** (IEC 61869-9 SV, IEC 61850-8-1 & 9-2 GOOSE, and PTP IEC 61850-9-3)
- PRP or **HSR** redundancy between Central Unit and Bay Units
- Bay units as Protection and Control IEDs. Very **cost-effective** for MV busbar differential protection
- **Cybersecurity** in accordance with IEC 62351, IEC 62443 and IEEE 1686-2013 standards.



ZIV
TIPS

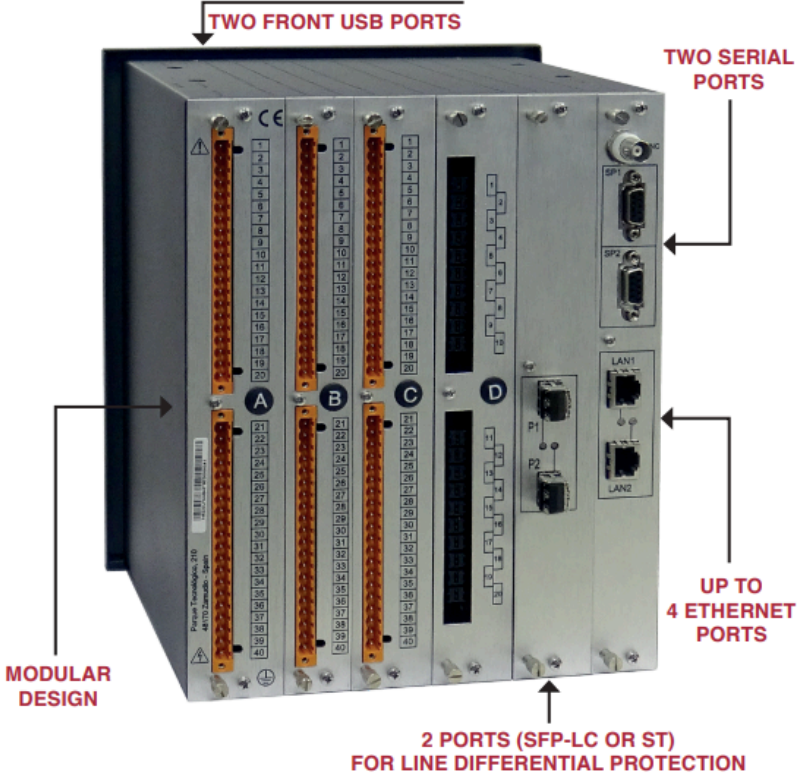
REGISTER
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PROTECTION & CONTROL RELAYS

DLF: LINE DIFFERENTIAL PROTECTION WITH DISTANCE BACKUP

Both units are suitable for lines of any voltage level, overhead or under ground, multiterminal, and single or parallel circuits.

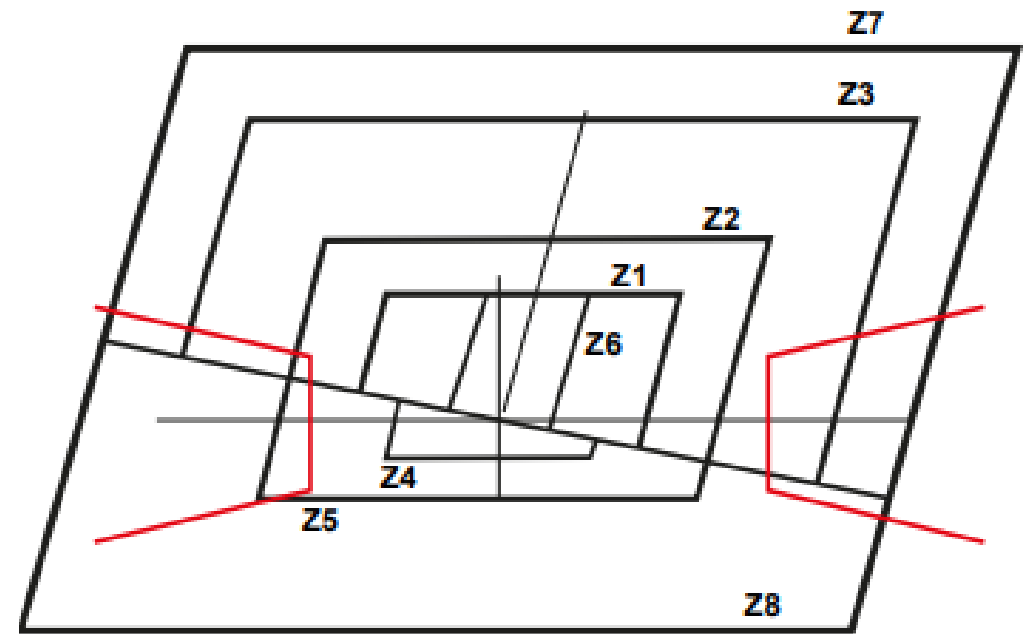
- DLF-**A**: for single breaker.
- DLF-**B**: for double breaker or breaker-and-a-half, when CTs are at the line side (1 single set of 3 CTs).



ZLF: DISTANCE PROTECTION

Suitable for lines of any voltage level, single or double circuit breaker with any configuration: overhead or underground, single or parallel circuits

- ZLF-**B**: for single breaker
- ZLF-**C**: for double breaker or breaker-and-a-half



Distance zones with quadrilateral characteristic and load limiters

IDF: TRANSFORMER PROTECTION

Protection for two to four winding transformers or autotransformers, of any voltage level, with single or double circuit breaker.

- IDF-**A**: for two windings transformers
- IDF-**B**: for up to three windings transformers
- IDF-**E**: for up to four windings transformers, or three windings transformers with one winding on breaker-and-a-half



IRF: FEEDER PROTECTION

Protection for distribution feeders, transformers and generators, transmission line backup, and BCU (Bay Control Unit for single or double circuit breaker).

- IRF-**A**: MV Feeder Protection & Control
- IRF-**B**: double breaker or breaker-and-a-half BCU
- IRF-**C**: general alarms BCU / I/O Box
- IRF-**D**: single breaker BCU

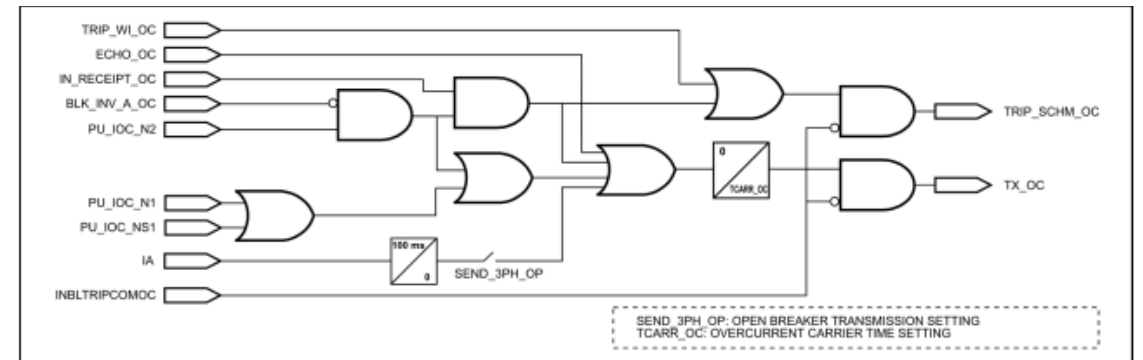


Figure 6. Remote Overcurrent Trip Scheme Block Diagram (Overcurrent)

RTF: AUTOMATIC VOLTAGE REGULATOR (AVR)

Voltage regulation for **up to 5 power transformers in parallel.**

Parallel transformer regulation by master-slave, circulating current and negative reactance methods.

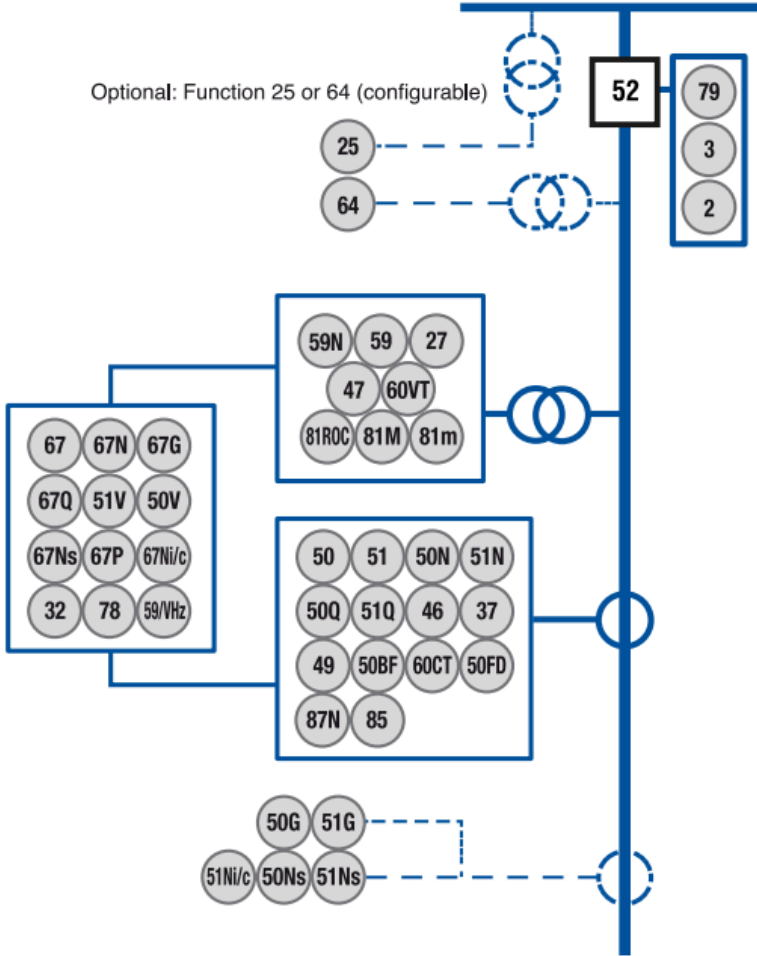
It also includes line voltage drop compensation



ANSI	Function	Uns.
90	Voltage Regulator.	1
	LDC (LDC-Z, LDC R-X).	1
	Under Voltage Block with Temporization.	1
	Maximum Switching Current Block.	1
	Voltage Out of Range Block with Temporization and Reset.	1
59	Power Reversal Detection.	1
	Tap Changer Monitoring.	1
81m	Phase Overvoltage.	1
81m	Underfrequency.	1
60VT	VT Supervision.	1

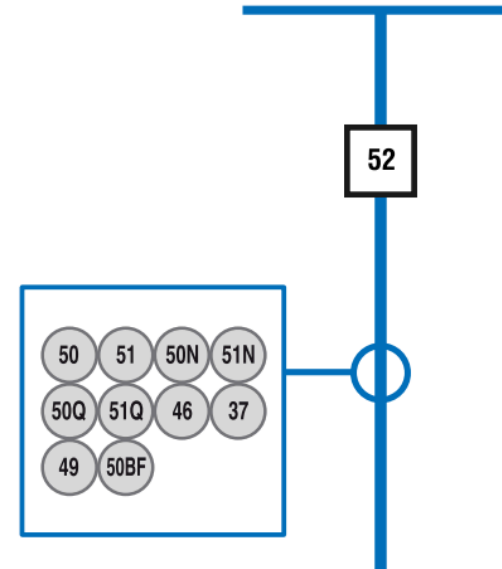
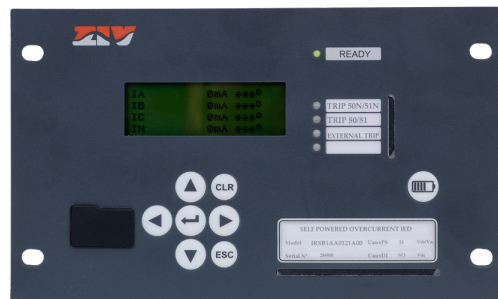
IRL: COMPACT FEEDER MULTIFUNCTION PROTECTION

Compact Feeder Multifunction solution for **MV switchgear**, with Load Shedding Function to ensure the stability of the system, Back-Up performing capability in HV lines and powerful built-in Control Logic Module



IRS: SELF-POWERED OVERCURRENT AND BREAKER FAILURE PROTECTION

Where dependable auxiliary power source is not available, the IRS Relay can be energized either directly from Main Current Transformers, AC/DC Auxiliary Voltage or through the USB Front Port.



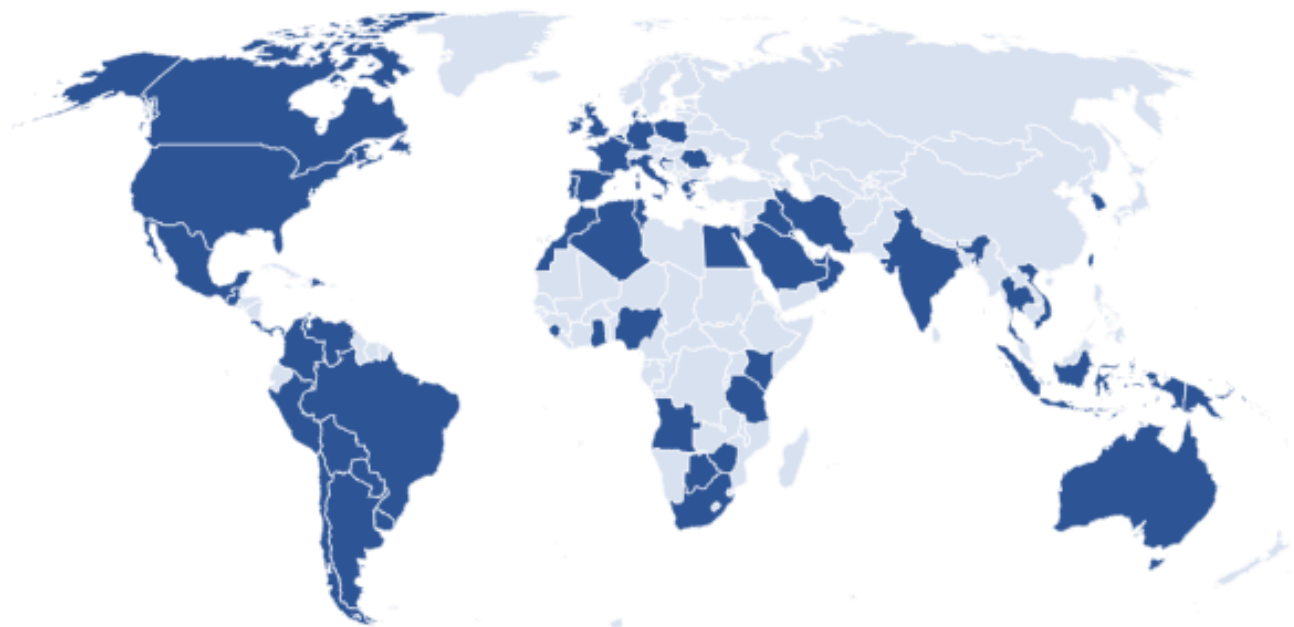
PROTECTION & CONTROL RELAYS

MODEL	DESCRIPTION	MANUAL
IDF	TRANSFORMER PROTECTION	MOIDFA2307lv00
IRF	FEEDER PROTECTION	MOIRFA2206lv23
DLF	LINE DIFFERENTIAL PROTECTION WITH DISTANCE BACKUP	MODLFA1907lv40
ZLF	DISTANCE PROTECTION	MOZLFBC2303lv09
DBF	DISTRIBUTED BUSBAR PROTECTION	MODBFA2305lv07
RTF	AUTOMATIC VOLTAGE REGULATOR	MORTFA1902lv30
IRL	COMPACT FEEDER PROTECTION	MOIRLF1806lv22
IRS	SELF- POWERED RELAY	MOIRSA1904lv03

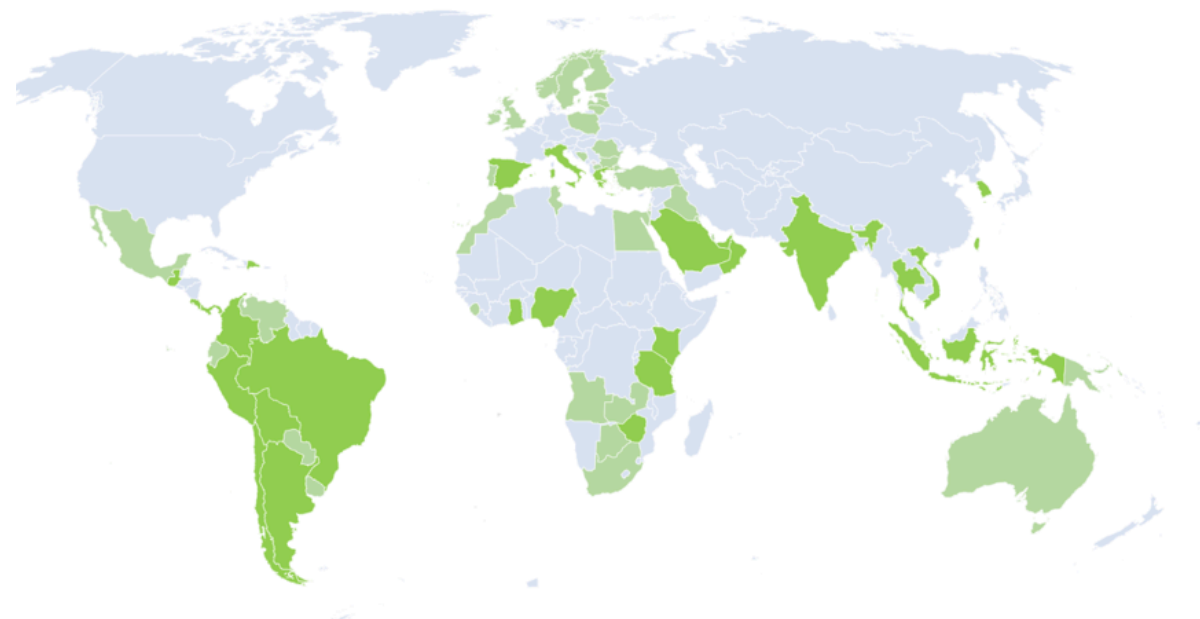


References & Homologations

References

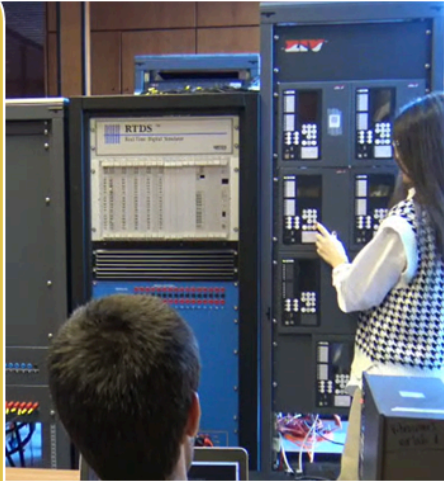


IEDs certified



VALUE ADDED SERVICES

SYSTEMS INTEGRATION & ENG. SERVICES | USE CASES

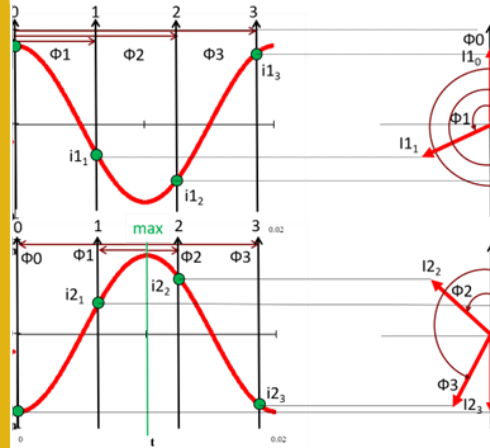


Settings calculations and selectivity studies

RTDS Lab

Feasibility studies

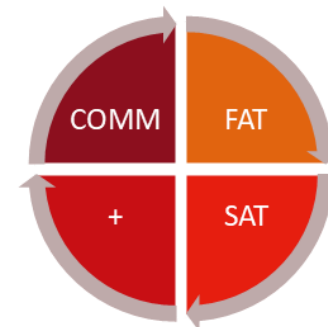
ANALYSIS



Engineering



DESIGN



IMPLEMENTATION



Training

Tech assistance

Preventive maintenance

Repairing

Retrofit / Revamping

+ SERVICES

PROJECTS

COMPLETE SAS FOR RENEWABLES INTEGRATION



IBERIA



BRAZIL



LATAM

INDIA

APAC

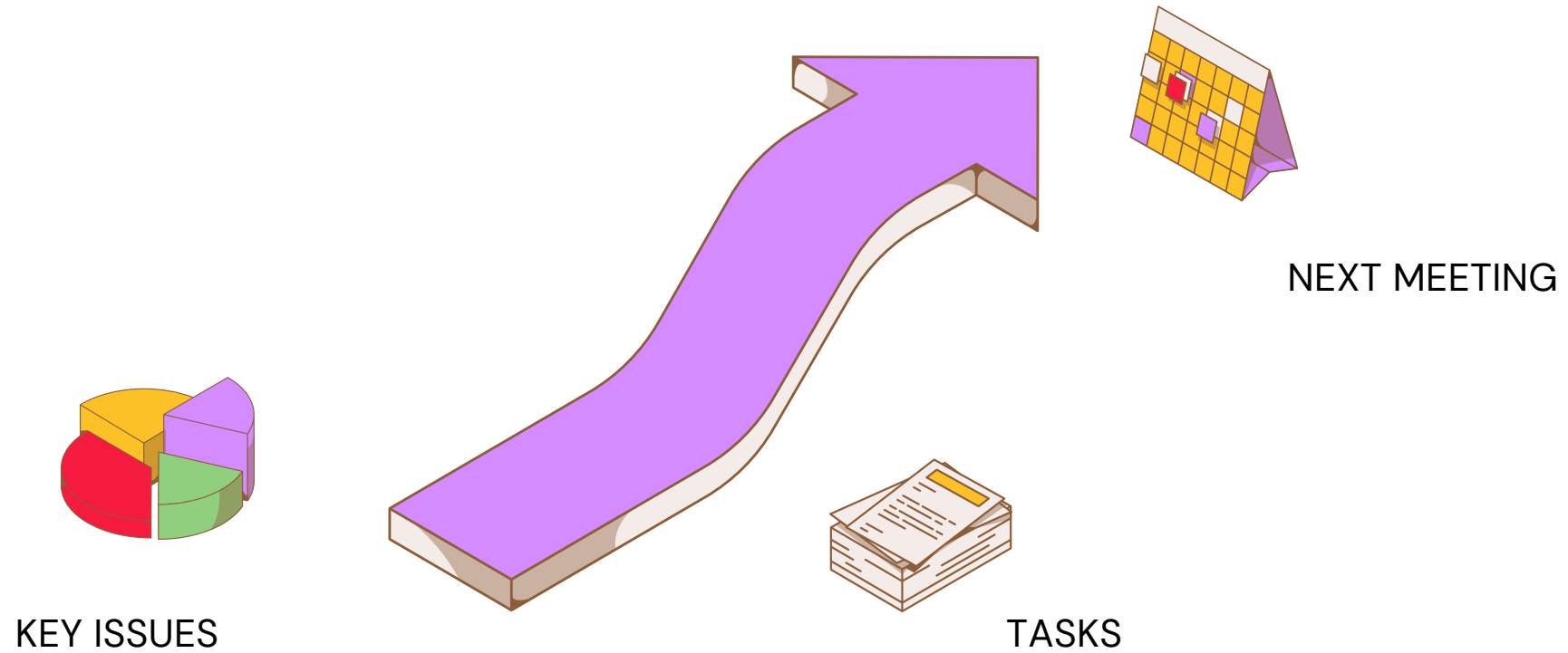
EPCS / SYSTEMS INTEGRATORS

PROMOTERS / IPPS

ME

Next step

Let`s spend 10 min together to identify





Contact us now for further information
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