.Deliverable name	Launch File – Sepam Upgrade 5 project	Id: Sepam upgrade 5 project launch file_V1.doc

Owner: **JB. SAMUEL**	*Stage Gate:* **Launch commitment**	
Version date: September 5th, 2012		

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1. Purpose of this project

Since Sepam series 20, series 40 and series 80 commercialization, many Product Evolution Requests (PERs) have been sent by our country correspondent (more than 200).

Referring to these PERs and in order to capitalize on Sepam series 20, series 40 and series 80 product lines, "Upgrade" projects allow us to enhance the Sepam range with new functions and accessories.

The purpose of “Upgrade” projects is to implement new functionalities to grow Sepam sales.

Since May 2006, 5 upgrade projects have been launched (Upgrade 1; 1,5; 2, 3 and 4 projects).

The last Sepam "Upgrade 4" & Sepam Series 60 project were launched in April 2011 and the following document is to prepare the next "Upgrade 5" project launch.

After a first evaluation, 18 PERs have been pre-selected. After a country survey, done in 2010, 8 PERs have been selected.

"Upgrade 5" project concerns Sepam series 60 & 80.

The commercial launch is planed end of December 2012.

For information, all the PERs (more than 200) sent to IED activity (ex EM or PMC depatment) have been transfered to a new database and will be considered as "seeds" for “Fusion project” (new relay range).

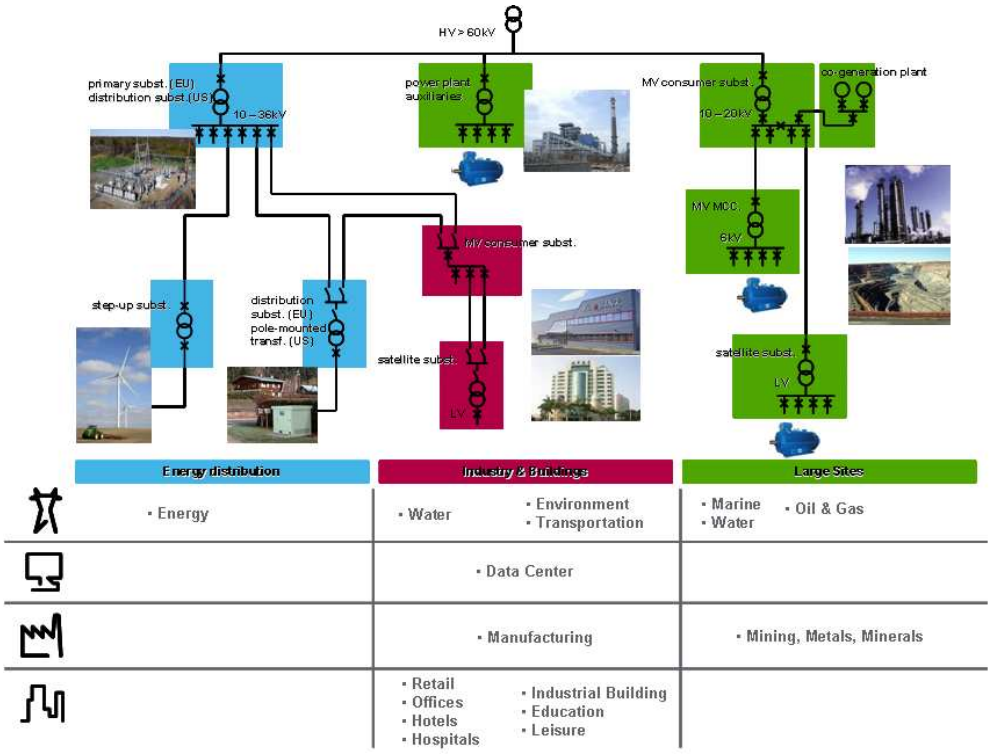
2. Selected Product Evolution Requests

The final Upgrade 5 project content is:

- IEC61850 EDITION 2 & FTP access
- Data Log on all applications
- Motor Start Report, Trend only on motor applications
- 49RMS and 66 motor protection improvement for new motor
- 78PS – Improvement
- Frequency protection low and high improvements (with an accuracy of 0.01Hz)
- Distributed generation - Grid Code - Low voltage ride through (LVRT)
- Extended memory cartridge (**hardware creation**) x2 memory capacity of storage (Disturbance recording, data log, trends)

3. The Market

3.1. Relay market segmentation



- Industry (in case of single or several substations) :

Channels and decision makers : Local contractors, panel builders

- **Engineered substation for end-user sites :**
  - Business type : Large turnkey contracts
  - Influencer / specifyer for relays : Engineering companies or system integrators
- **Single substation for single customer :**
  - Business type : Medium to small size projects
  - Influencer / specifyer for relays : Panel builders or design institutes

- Large sites (Oil and Gaz / Mining Minerals and Metals…) **:**

Channels : Panel builders

Decision makers : Engineering, end customers

- **Engineered substation for end-user sites :**

- Business type : Large turnkey contracts
- Influencer / specifyer for relays : Engineering companies or system integrators

3.2. Motor management market

The estimation of the motor management * revenue for 2011 is 2,5 B$ with 15% of Compounded Annual Growth rate (CAGR) from 2010 to 2015.

*Motor management is compound of drive, soft starter, autotransformer and protections to start the motor.

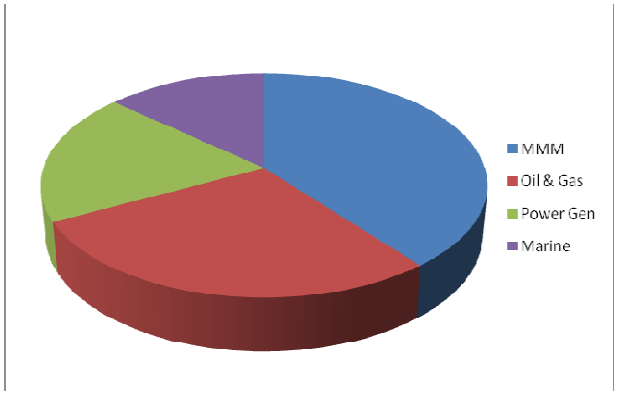
Break down through the different technologies:

Direct on line (DOL)	73,9%
SoftSart	16,8%
Autotransformer	5,6%
Others	3,7%

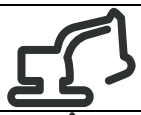
So it means that 79,5%. (DOL + Autotransformer) of the market uses IED protection or nothing.

3.2.1. Segmentation

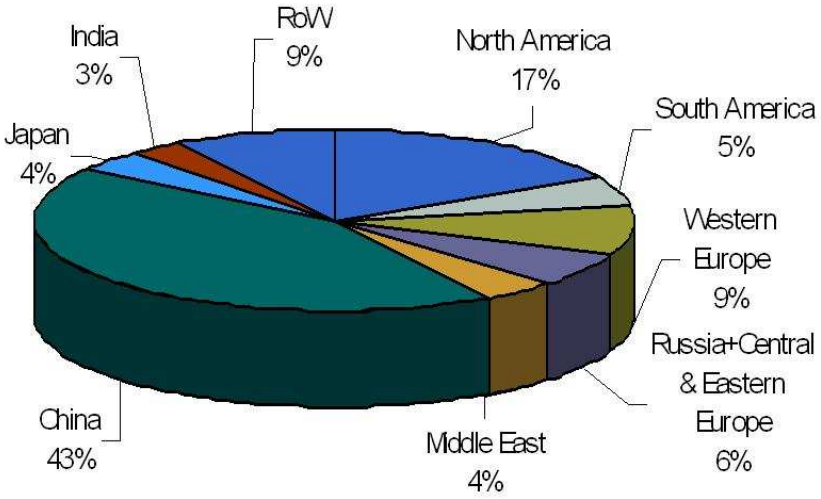
Who is using motors?



Motor segmentation 2011	%

MMM		35
Oil & Gas		25
Power Generation		17
Marine		12

Where motors are used?

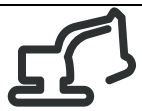


Motor management geographic 2011

3.3. Targeting segmentation for Upgrade 5

The targeted segments for the new functions of the Upgrade 5 are “Industry” and “Large sites”:

- Oil and Gas
- Mining Minerals and Metals,
- Marine,
- Power generation.

Segmentation		Specific evolutions
Oil & Gas		IEC 61850 Edition 2 Motor report Motor protection improvements Extended memory cartridge
MMM		Data log Motor report Motor protection improvements Extended memory cartridge
Marine		Motor report Motor protection improvements
Power generation		Frequency protection low and high improvements (with an accuracy of 0.01Hz) Distributed generation - Grid Code - Low voltage ride through (LVRT) 78PS – Improvement

The main drivers for the data log and motor reports are:

1. Energy efficiency & Environmental friendly
2. Suitable for weak grid and high power motors
3. High reliability & low maintenance cost

The customers who want to optimize the production process are the most involve in the following of the motor and metering.

3.1. Size and growth of the potential market (projected quantity 2016)

According to the result of the survey done in 2010, the total additional sales should be 4 500 Sepam per year in 1016 :

Rank	Descriptions	Sales expected
1	IEC 61850 EDITION 2 + FTP	2200
2	Data log creation	1000
3	Motor Start Report, Trend	500
4	Extended memory cartridge	200
5	Frequency low and high evolutions	200
6	Distributed Generation - Grid code compliant	200
7	78PS – Improvement	200
8	49RMS and 66 motor protection improvement	200
TOTAL		4 500

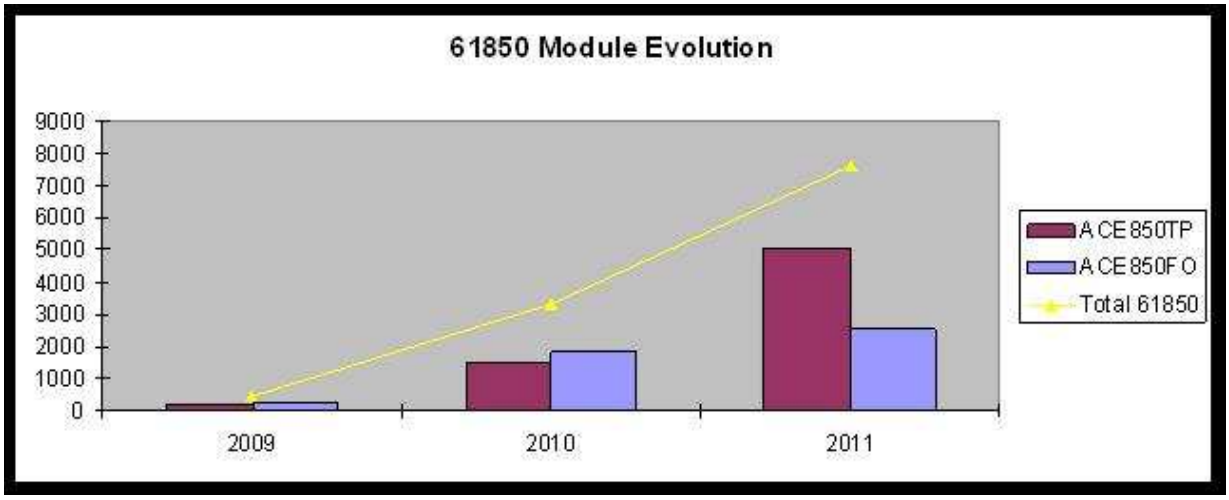
Forecasted quantity	2013	2014	2015	2016
IEC61850 + FTP	**100**	**500**	**1000**	**2200**
Rest of the PER	**700**	**1700**	**2000**	**2300**
Total	**800**	**2200**	**3000**	**4500**

4. Offer definition

4.1. IEC 61850 Edition 2 & FTP access

The increase of sales of IEC 61850 references is the strongest of the Sepam catalogue, so Automation decided to continue the developments in this direction by passing the EDITION 2 on the Sepam range.

Evolution of the IEC61850 RSTP redundancy board on Series 40, 60 and 80



4.1.1. IEC 61850 Worldwide developments

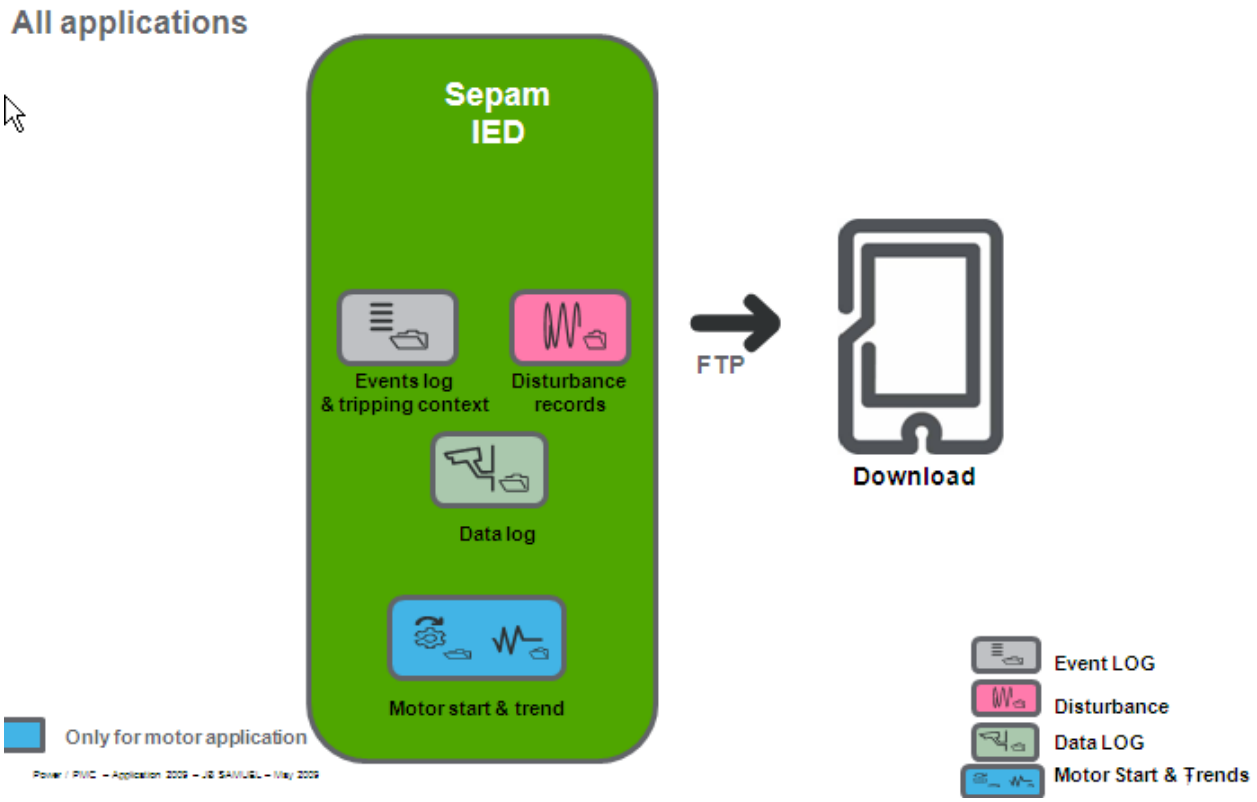
The main elements of the Edition 2.0 of the standard are :

- to correct or clarify some unsatisfactory points of edition 1.0 (reports for instance). This is mainly, but not only, covered by the integration of the technical issues collected on a dedicated web site (www.tissues.iec61850.com);
- to extend the existing model by defining new objects covering new fields;
- to improve and extend the offered services.

For Sepam the most visible objects are

- Sequence of events (SOE) in a readable text file stored,
- Fault report in a readable text format,
- FTP remote access to the equipment.

Target: Sepam series 40, 60 and 80, all applications



The Sepam series 40, 60 and 80 are ready to pass the tests following the standard Edition 2

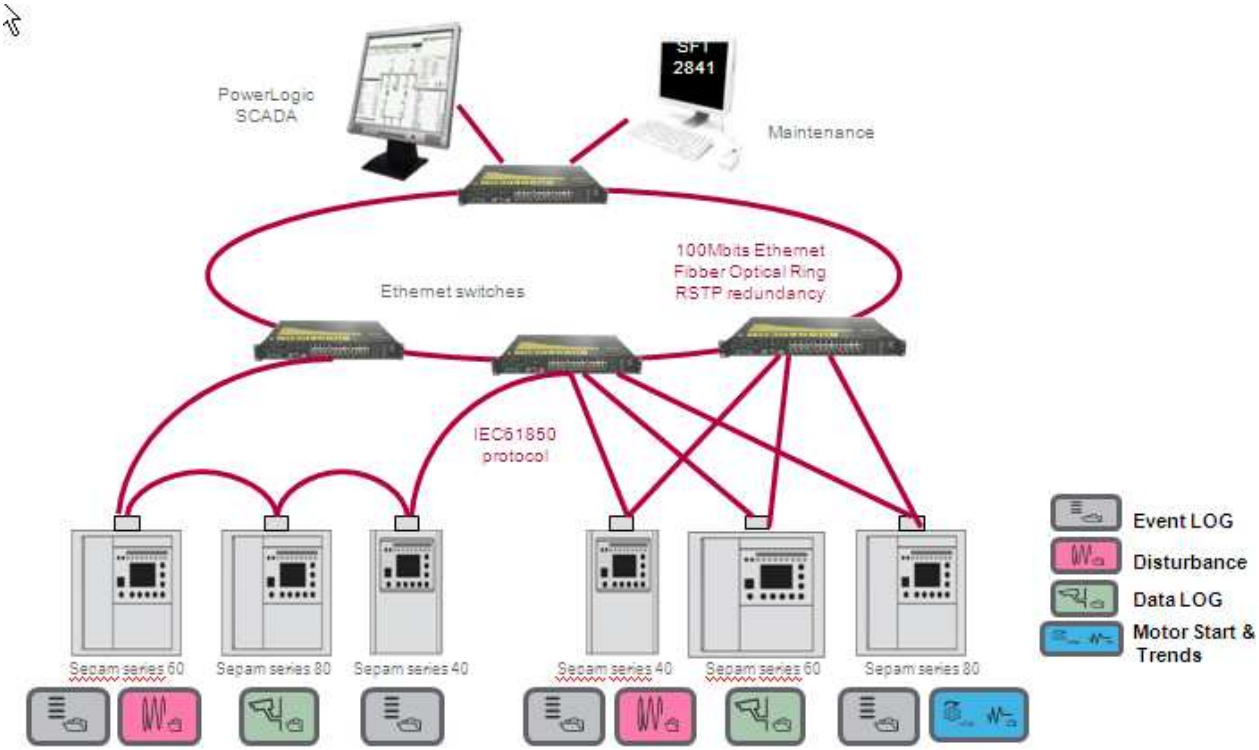
IEC 61850-6, 7-1, 7-2, 7-3, 7-4 and 8-1

The certification campaign for Sepam will take place at the begin of 2013 (after the SELL decision), because, at this time, the test procedures are not fully defined by the standard itself.

The development of the Sepam is already done and we are waiting the publication of the test cases defined in the UCA international Users Group Device Test procedures to engage the certification with the B level.

Here below you can find the detail of the test procedures. Notice that you have to add the group LOG CONTROL BLOCK to have the content of the IEC61850 next certification.

1 Basic Exchange (18/24)	9a GOOSE Publish (7/12)
2 Data Sets (3/6)	9b GOOSE Subscribe (9/10)
4 Setting Group Selection (2/3)	12a Direct Control (5/11)
5 Unbuffered Reporting (13/18)	12d Enhanced SBO Control (10/19)
6 Buffered Reporting (16/20)	13 Time Synchronization (3/4)
	14 File Transfer (4/7)

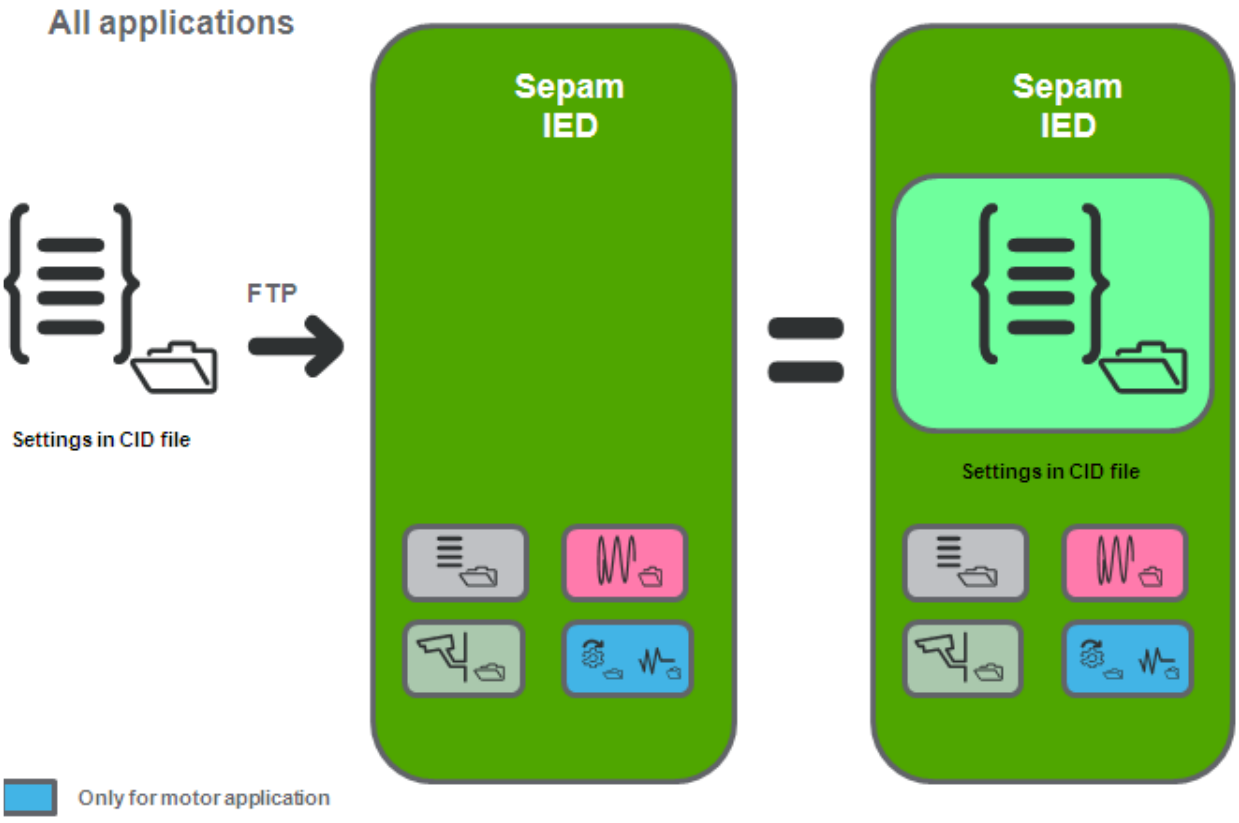


An example of function block accessibility through the information network

4. Settings in CID file – OTM for Spain (prototype)

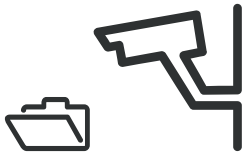
***WARNNING: This function is presently in field test with ENDESA (Spain Utilities), for further deployment on others countries /customers please contact us.**

For ENDESA we develop a capacity of storage of the settings of the protection into the CID files*.
Now is possible to configure the IED (series 80 only) through the IEC 61850 file.



Target: Sepam series 80, all applications

4.2. Data log functions



This function is able to store a list of measurement during long period of time.

Target: Sepam series 60 and 80, all applications

For each Sepam applications you have the possibility to store metering values limited to a number of 20. Customer can choose the value in a relevant metering value list of the Sepam.

Sepam logs following **a specific duration** (setting from 1s to 30 days) and **a specific sampling frequency** (setting from on by 1s to once by 24 hours).

In function of the duration and the sampling frequency the memory allocated for the data log in the Sepam is divided in a number of records.

With an option button, the customer can choose to have a **circular buffer mode** (by default) (It means that at the end of the memory area, the first value recorded are overlapped with the latest value sampled) **or** a **limited mode**, the data log stops at the end log area and a message is generated.

The customer can choose the duration and the frequency of launch (each minutes, hours, days, or always) using the logical equation.

Each time a log is started a new record (bloc) is used.

If a data log record is in operation when a new one is launch, the priority is given to the new one.

The starting/stopping conditions are given by
- Digital input,
- Goose,
- TC
- Communication.

Characteristics resume:

1. Sample frequency from 1s to 24 hours,

2. Record duration 2 modes : mode start/stop (maximum 30 days) mode circular buffer (unlimited),
3. Number of records max : 20 Start/stop
4. Number of measurements by record : 15
5. COMTRADE format record (on PC)

Examples of size of recording datalog blocks:

- 20 points each 1mn during 24H
- 20 points each 30 mn during 30 days.

Measurements available:

Tension		
Tensions simples (entrées principales)	V1 V2 V3	V
Tensions simples (entrées supplémentaires)	V'1 V'2 V'3	V
Tensions composées (entrées principales)	U21 U32 U31	V
Tensions composées (entrées supplémentaires)	U'21 U'32 U'31	V
Tension résiduelle	V0 V'0	V
Tension point neutre	Vnt	V
Tension directe	Vd V'd	V
Tension inverse	Vi V'i	V
Fréquence	F F'	Hz
Energie		
Puissance active	P	MW
Maximètre de puissance active	Pmax	MW
Puissance active par phase	P1 P2 P3	MW
Puissance réactive	Q	Mvar
Maximètre de puissance réactive	Qmax	Mvar
Puissance réactive par phase	Q1 Q2 Q3	Mvar
Puissance apparente	S	MVA
Maximètre de puissance apparente	Smax	MVA
Puissance apparente par phase	S1 S2 S3	MVA
Facteur de puissance (cos φ)	cosPhi	MVA
Compteur énergie active (+ et -)	Eam+ Eam-	MW.h
Compteur énergie active calculée (+ et -)	Eac+ Eac-	MW.h
Compteur énergie réactive (+ et -)	Erm+ Erm-	Mvar.h
Compteur énergie réactive calculée (+ et -)	Erc+ Erc-	Mvar.h
Vitesse de rotation du rotor	Rot104	tr / mn
Température	T1 à T16	° C /° F
Diagnostic réseau		
Taux de déséquilibre	Ii / Ib	% Ib ou % I'b
Taux de distorsion harmonique courant	Ithd	%
Taux de distorsion harmonique tension	Uthd	%
Déphasage φ0, φ'0, φ0Σ	φ0, φ'0, φ0Σ	°
Déphasage φ1, φ2, φ3	φ1, φ2, φ3	°
Echauffement	Ech	%
Compteur horaire	CH	heures
Courant différentiel phase	Idiff1, Idiff2, Idiff3	A

Assistance à la maintenance		
Echauffement	Ech	%
Compteur horaire	Ch	heures
Courant différentiel phase	Idiff1, Idiff2, Idiff3	A
Courant traversant phase	It	A
Impedances apparentes directes et entre phases	Zd Z21 Z32 Z13	Ω
Tension harmonique 3 point neutre	Vt_H3 V3nt V3r	% Vntp
Tension harmonique 3 résiduelle	Vo_H3	% Vnp
Surveillance des ampères coupés	S(kA)2	$(kA)^2$
Surveillance alimentation auxiliaire	Vaux	V
Déséquilibre de courant capacitif	Ir'1 Ir'2 Ir'3 Ir'0	A

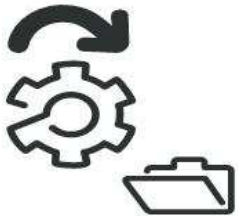
4.3. Motor Start Report and Trends

The customer value for the Motor Start report is the capacity to **adjust your motor protection** at the closest of your motor demand.

The customer value for the Motor Trends is to follow the motor during months and **to detect deviation**.

Target: Sepam series 60 and 80, MOTOR applications ONLY

4.3.1. Motor Start report

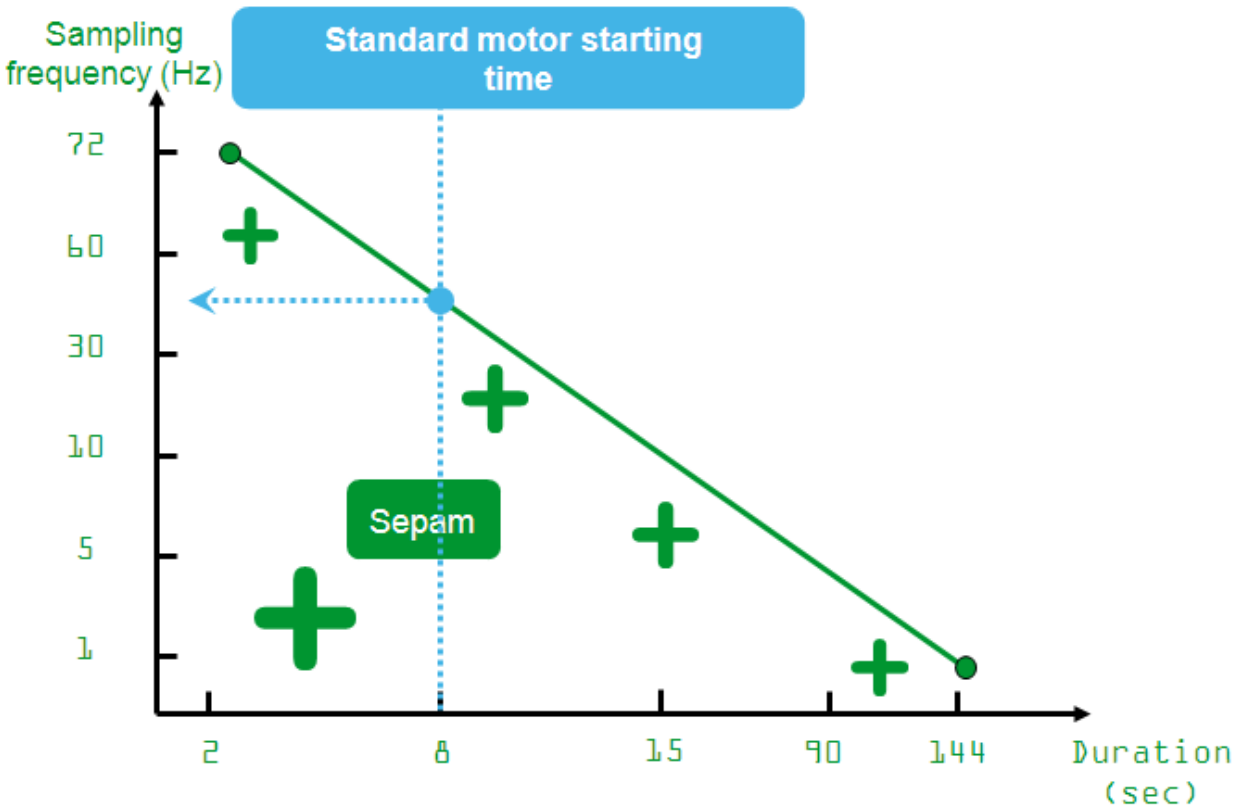


For the motor start report, the Sepam will able to record **5 reports (min) of 144 sec maximum.**

The sample frequency is dynamic in function of the duration of the report. The point number is fixed to 144.

Examples of size of recording Motor Start blocks:

For a 144 sec duration report 144 pts) represents a sample frequency of 1 Hz.
For a 2 sec duration report (144 pts) represents a sample frequency of 72Hz.



Measurements available:

Data	Number	Data	Number	Data	Number
U12,U23, U31	3	I direct	1	Io	1
I1,I2, I3	3	I inv.	1	Vo	1
Temperature	16	V direct	1	Motor torque	1
Rotation speed	1	V inv.	1	Slip	1
Rotor resistance	1	Stator resistance	1	Frequency	1
Rotor heating	1	Stator heating	1	Motor heating	1

The customer chooses the data he wants to show in the report.

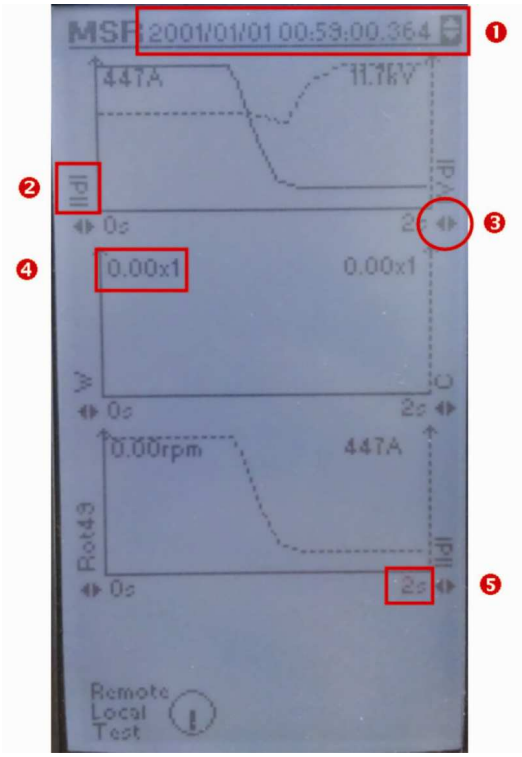
Depending of the number of data that the customer has chosen, the SFT2841 calculates the maximum records number storable in the Sepam memory.

Characteristics resume:

- **Sampling frequency max 72 Hz**
- **Duration from 2s to 144s**
- **Number of stored files 5 (20 with an extended cartridge)**
- **COMTRADE format record (on PC)**

Example of Motor start report on the Sepam front face (MIMIC):

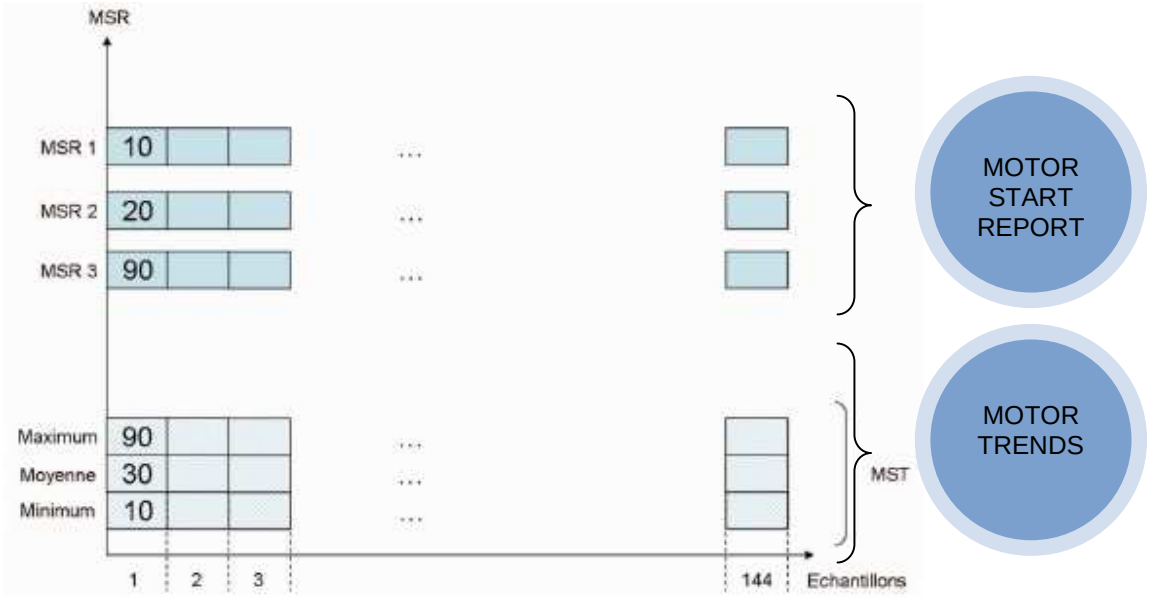
1. Time Stamp
2. Name of the left measurement
3. Change the right measurement
4. Maximum value reached
5. Record duration



4.3.2. Motor Tends

The “Data trend” makes an envelope calculation and an average (min, max and average of each point) of the 30 previous days of record.

The trend functions have the same duration and the same sampling frequency than the day to day data report. The day to day data aren’t stored.



Measurements available:

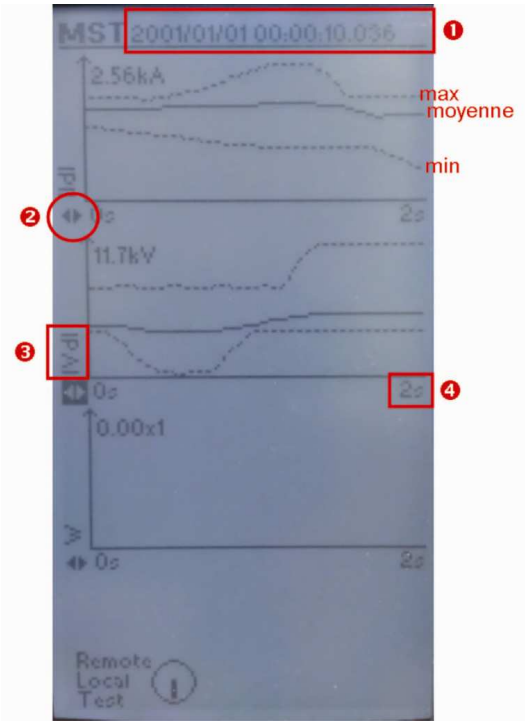
Data	Number	Data	Number	Data	Number
U12,U23, U31	3	I direct	1	Io	1
I1,I2, I3	3	I inv.	1	Vo	1
Temperature	16	V direct	1	Motor torque	1
Rotation speed	1	V inv.	1	Slip	1
Rotor resistance	1	Stator resistance	1	Frequency	1
Rotor heating	1	Stator heating	1	Motor heating	1

Characteristics resume:

- **Monthly report of all motor start records**
- **Min, max and average value**
- **COMTRADE format record for download on PC**

Example of Motor Trends on the Sepam front face (MIMIC):

1. Time Stamp
2. Measurement selection
3. Measurement name
4. Duration



4.4. Thermal protection improvement (49RMS)

Target: Sepam series 60 and 80, MOTOR and TRANSFORMER applications.

Thermal protection has been improved for the new type of motors coming on the market. Now with the new thermal models is possible to follow closer the thermal evolution of a motor or transformer for a better protection in a hot or cold state.

4.5. Loss of synchronization (78PS) – Improvement

Target: Sepam series 60 and 80, GENERATOR applications ONLY

A new method of calculation based on the angle and the was implemented on Sepam with the collaboration of EDF.
Now the 78PS is fully operational and tested on a large type of real situations on many different contexts of electrical networks.

4.6. New Distributed generation - Grid Code - Low voltage ride through (LVRT)

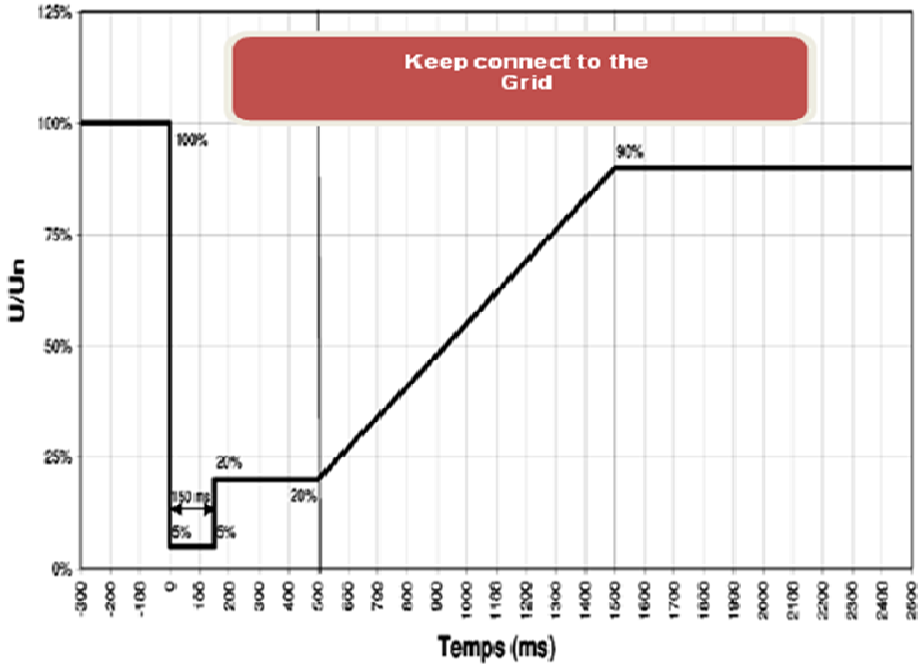
Target: Sepam series 60 and 80, all applications

The constraints of connecting of the installations of production (Grid codes) in the distribution networks vary according to countries, and distributors.

In a general way, the installations of production have to stay in functioning when the frequency and\or the voltage on the distribution network reaches exceptional values during limited durations.

In summary, everything must be made for that the installations of production participate to support the distribution network.

To illustrate the constraint of holding in the variation of the voltage of the distribution network, ERDF in defined on April 25th, 2008 in the governmental publication, the following curve:



https://www.entsoe.eu/

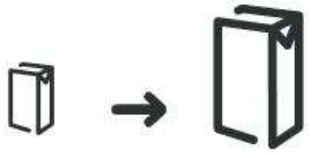
Now, the ENTSOE 2012 has finished a draft to standardise the function by giving a name Low voltage ride through (LVRT) and some rules of implementation.

Reliable. Sustainable. Connected.

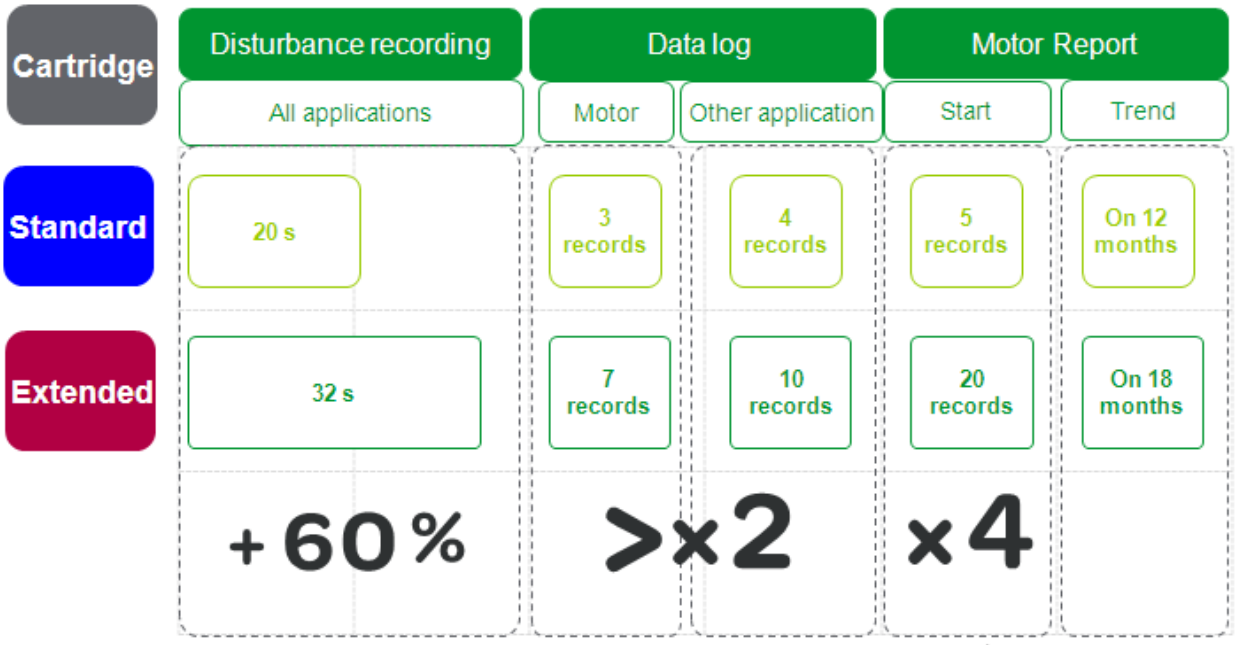
Characteristics resume:

1. **Customized profile to stay connected to the Grid ,**
2. **Compliant with ENTSOE 2012 ,**
3. **Define point to point curve,**
4. **Function (T) = % of U/Un ,**
5. **First relay ready on the market conform to ENTSOE 2012**

4.7. Extended memory cartridge (hardware creation)



Target: Sepam series 80, all applications



4.7.1. Reference creation and price list

Memory cartridge	MMS020	59707	102,50 €
Extended memory cartridge	MMR120	59701	232,50 €

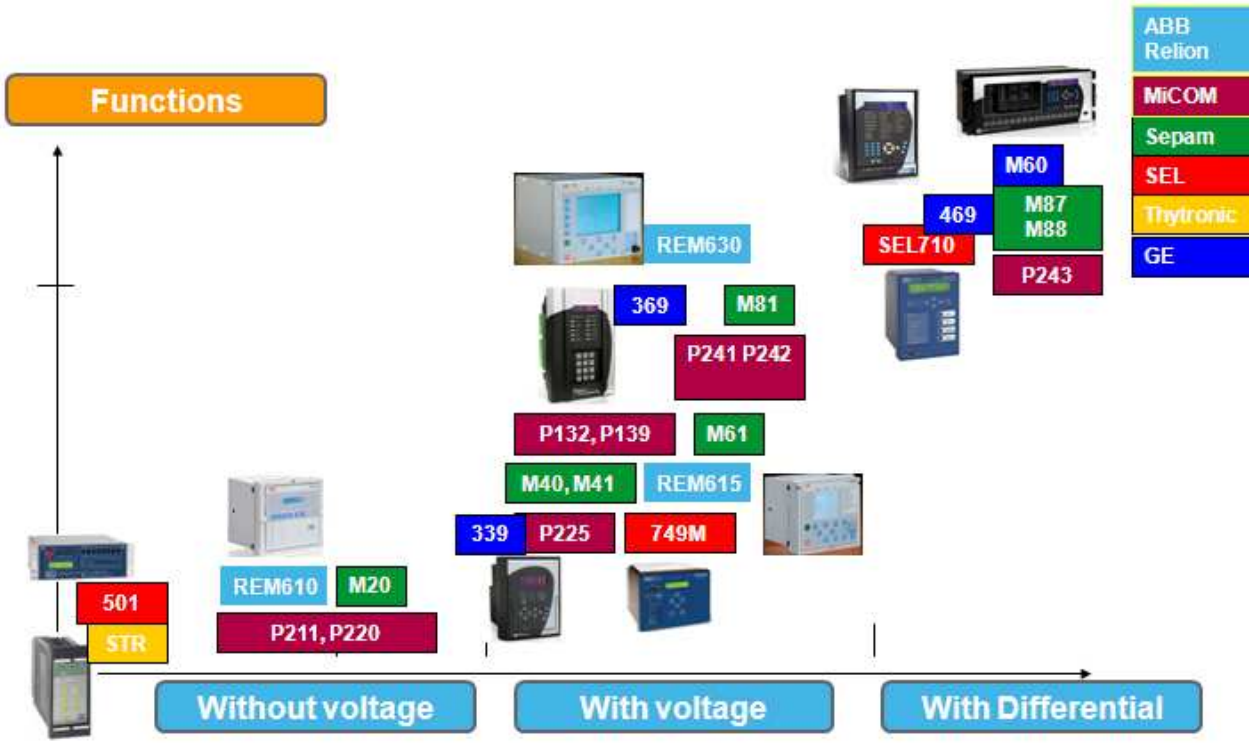
4.8. Pc setting software

- SFT2841 setting and operation software :
    - o New version V13.xx
    - o The SFT 2841 is the setting and operating tool for Sepam series 20, series 40, series 60 and series 80. It is able to manage all the evolutions created by the present project.
    - o Settings file comparison tool (able to show the differences between 2 Sepam files),
    - o Checksum on the setting files to prevent manual modifications,

- CET850 configuration software for IEC61850 protocol :
    - o The CET850 software is used to easily create, modify and consult the SCL (Substation Configuration Language) configuration files for the IEC61850 communication protocols for the Edition 1 or 2. In all cases, you have to choose in what Edition (1 or 2) you want to run at the IED level.

5. Competitive analysis on Motor application

5.1. Competitor overview

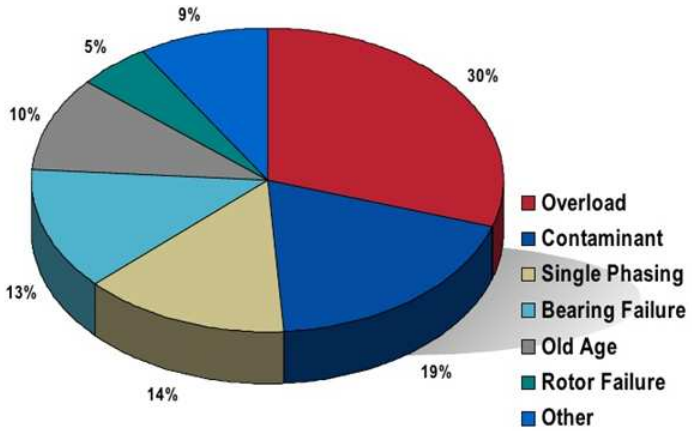


5.2. IED comparison

	ABB Rem630	SEL 710	GE 469	Sepam M87
Motor Start & Trends	+	+	+	+ +
Mimic display	+	- -	-	+
Harsh Environ.	-	-	-	+
Settings facilities	=	+ + Name Plate	+ + Self learning	+
Funct. Safety SIL2	-	-	-	+ +
ANSI 49 double bodies	+ +	+	+	+ +

Compare to competitors series 60 and 80 on Motor function bring competitive advantages:

- **Mimic display** (able to display multiple curve at the same time),
- **Motor start with a high sampling frequency:** and with a large memory to store the record files,
- **Thermal protection with double body models: 30%** the motor failure come from overload so the thermal protection is the key function for the motor protection. Only ABB uses this kind of new algorithm to protection the new generation of motor.
- **Harsh environments:** 19% of the motor failure come from the environment contaminations, the coated boards of the Sepam is a powerful advantage to increase the IED lifetime.



- *Motor failure origin repartition, 2011*

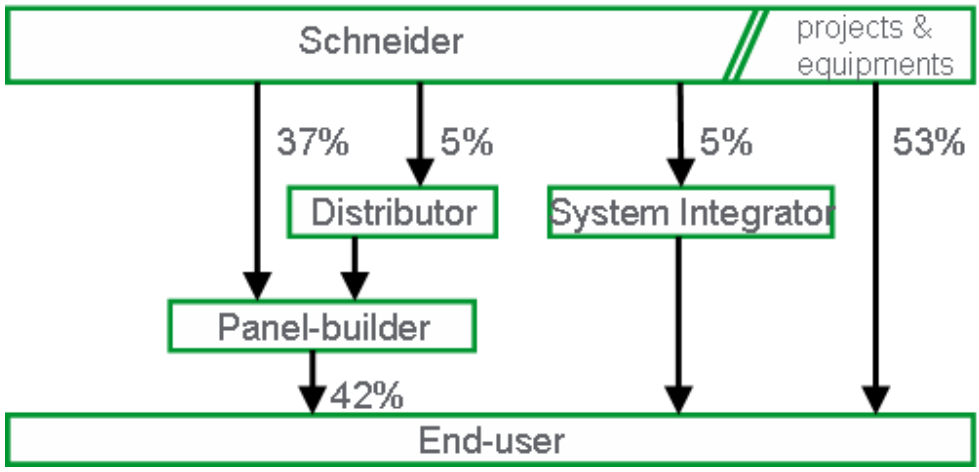
Compare to competitors series 60 and 80 on Motor function have some weakness:

- ***Name plate facility settings:*** *SEL offers this functionality on the SEL710. Just copy the information listed into the name plate of the motor to protect it. It's seems to be a very attractive idea. The objection which can be raised it's : all motor name plate do have exactly the same information around the world, and the second are you sure that the information on the motor is the right one (rewiring, ageing, etc).*
- ***Self learning:*** *directly at the opposite side, GE offers a self learning protection to fit exactly the protection to the motor without any information. This function needs of a multiple starts of the motor in some different starting contexts (loaded, empty, etc).God algorithm but seems to be difficult to use it in the real life.*

6. Sales Channel and Pricing Policy

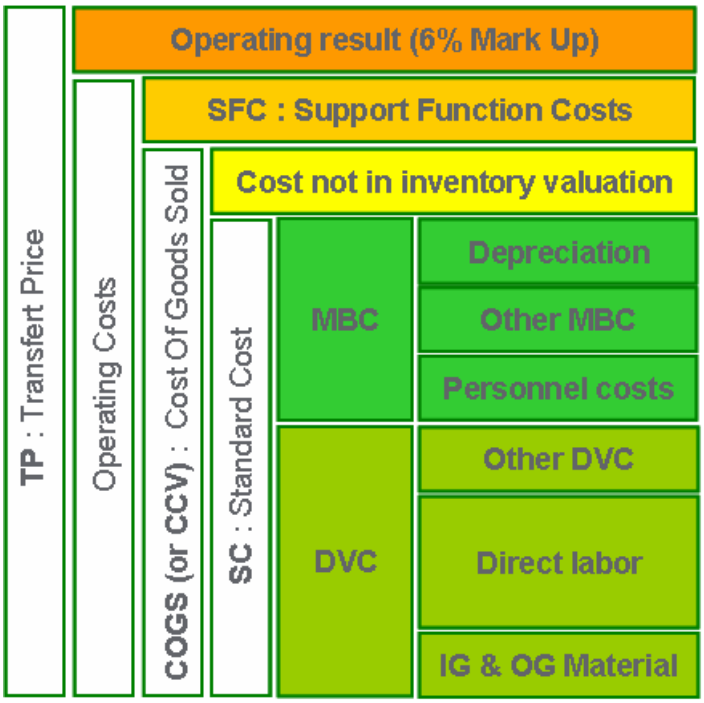
6.1. Sepam Sales channels (year 2009)

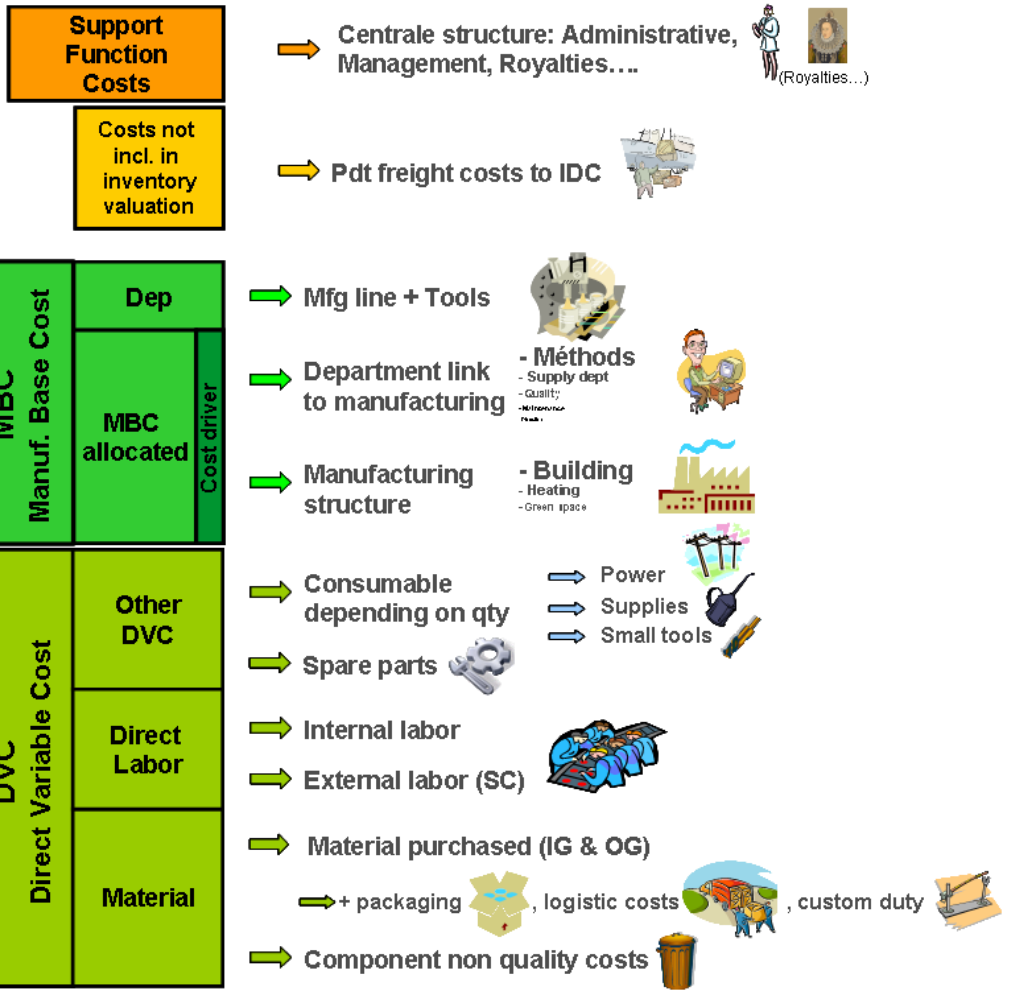
According to country or zone strategy, the sale channels remain the same as currently



Note : China excluded

6.2. Cost breakdown definition


Operating result (6% Mark Up)
SFC : Support Function Costs
Cost not in inventory valuation
TP : Transfert Price
Operating Costs
COGS (or CCV) : Cost Of Goods Sold
SC : Standard Cost
MBC
DVC
Depreciation
Other MBC
Personnel costs
Other DVC
Direct labor
IG & OG Material


Support Function Costs
Centrale structure: Administrative, Management, Royalties….
(Royalties…)
Costs not incl. in inventory valuation
Pdt freight costs to IDC
MBC Manuf. Base Cost
Dep
MBC allocated
Cost driver
Mfg line + Tools
Department link to manufacturing
- Méthods
- Supply dept
Manufacturing structure
- Building
- Heating
- Green space
DVC Direct Variable Cost
Other DVC
Direct Labor
Material
Consumable depending on qty
Power
Supplies
Small tools
Spare parts
Internal labor
External labor (SC)
Material purchased (IG & OG)
+ packaging
, logistic costs
, custom duty
Component non quality costs

6.3. Extended memory cartridge series 80 Price list, DVC, COGS (CCV) target and transfer price to IDC*

Memory cartridge	MMS020	**59707**	**102,50 €**
Extended memory cartridge	MMR120	**59701**	**232,50 €**

Offer	DVC target (Euros)	COGS (CCV) target (Euros)	Transfer Price (TP) to IDC (Euros)	Comments
Extended memory cartridge for Sepam series 80 Only (ref : 59701)	16,80 €	18,68 €	19,80 €	 MMR120

7. Transfer price to country policy

The transfer pricing will be handled according to the standard procedures defined with the "Schneider Electric Transfer Pricing Policy" effective in January 2011.

This range of products is only sold via the IDC* (International Distribution Center) or the Regional Distribution Center.

The transfer prices applied to countries, REU (Regional Equipment Unit) and services that work on projects and contracts, comply with the Corporate rules (markdown process, cost+ …).

Each country marketing team will need to work with their IED Business Development person and the appropriate Finance people to establish the pricing and the markdown file.

8. Repair and exchange policy

Each country is responsible for warranty exchange and commercial consideration exchange as a part of their commercial costs.

The extended cartridge should be exactly at the same level of warranty (life warranty) than the standard one.

IED activity may request that units be returned for analysis if an issue is suspected or needs additional investigation. In such a case each country is responsible for returning the units to the IED activity (France). Therefore, please notify IED Global Tech Support of any issues regarding the Sepam and the accessories.

9. Customer value

9.1. Sepam range

With Sepam protection relay, save time at every step in project development and installation to consistently meet your project dealines :

- **Go for simplicity :**

  With muliti functional Sepam protectyion relays, you can measure, manage, analyze and produce diagnostics for all applications in an installation.

  Range modularity makes it easy to select the relay corresponding exactly to your needs.

  The range is structured for **typical applications (substation, transformers, generators, capacitors, busbars and motors)** and provides the necessary functions for each application : protection, metering, control and monitoring

  Starting with a Sepam base unit, **complete solutions** can be built up by adding **optional common modules (Input/Output, sensors, communication …)**

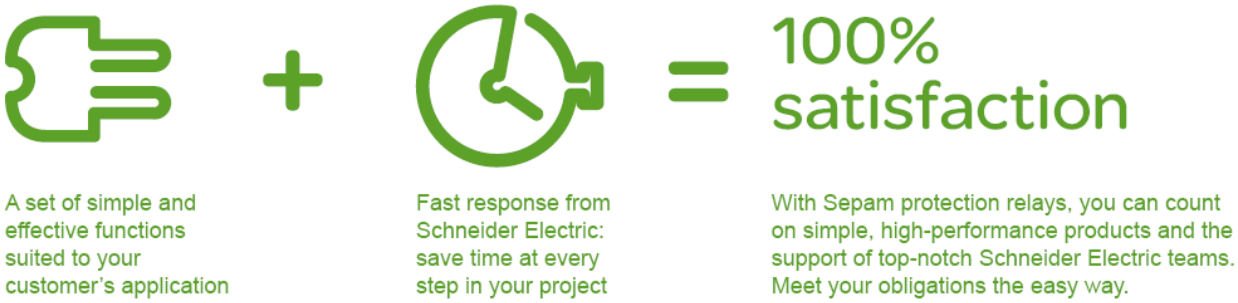
- **Make the configuration easily :**

  A single PC software tool for the entire Sepam range makes system start-up and operation particularly easy. **The user-friendly program** guides you step by step from the initial programming on through to final commissioning.

  Sepam produces **a detailed report** on system configuration and all the activated protection functions.

- **Communicate the open way :**

  In addition to the **DNP3**, **IEC69870-5-103** and **Modbus** standards, Sepam complies with **Ethernet TCP/IP (Modbus and IEC61850),** complies with network reconfiguration (RSTP IEC 62439) and uses the communication protocol that is today's market standard to interface with all brands of electrical distribution devices.



With Sepam protection relay, make maximize energy availability and profits generated by our installation while protecting life and property :

- **Keep informed to managed better :**

  With Sepam, you get intuitive **access to all information in your language** so that you can **manage your electrical installation effectively**. If a problem occurs, clear and complete information puts you in a position to make **the right decisions immediately**.

  The electrical supply is restored without delay.

- **Maintain installation availability :**

  Sepam maintains high energy availability thanks to its **diagnostics function** that continuously monitors network status.

  In depth analysis capabilities and high reliability ensure that equipment is de-energized only when absolutely necessary.

  Risks are minimized and servicing time reduced by programming maintenance operations.

- **Enhance installation dependability :**

  Sepam series 80 is **the first digital relay** to deliver dependability and behaviour in the event of failure meeting the requirement of **standard IEC 61508.**

  Sepam series 80 complies with the requirements of ATEX 94/9/CE directive

  Sepam manufacturing quality and environmental characteristics (Harsh Conformal Coating certified IEC 60068-2-60 and EIA 364-65A Class IIIA on the basic model) are so high that the units can be used in the **most severe environments,** including off-shore oil rigs and chemical factories.

9.2. Upgrade 5 Customer value

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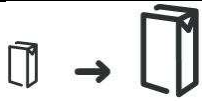
Function		Custom value
Edition 2 IEC61850 & FTP		✓ Ready for the future, ✓ Capacity to download log event, ✓ Capacity to manage the IED through the network with the FTP,
Data Log		✓ Record in continue the measurements needed, ✓ Use information when needed.
Motor start report		✓ Adjust your protection to your motor
Motor Trend		✓ Follow the deviations during months or years.
Extended memory cartridge		✓ More memory space to save disturbance recording, event, data, trend and to understand and diagnosis.

49 RMS improvement	for MOTOR and TRANSFORMER	✓ More than 30% of the motor failures are made by the overloads, ✓ Motor innovation needs thermal protection improvement, ✓ Better protection than never to prevent production outage.
Grid Code - Distributed Generation	entsoe	✓ Ready to connect to the Grid, ✓ Produce longer and better, ✓ Frequency protection low and high improvements (with an accuracy of 0.01Hz), ✓ 78PS – Improvements.

10. Communication and Launch

10.1. Launch schedule

- Launch Commitment : September 30th, 2012
- Produce Decision : Octobre 23th, 2012
- Sell Decision : December 30st, 2012

10.2. Tools

For more information (more details, N° of the document…), please refer to the Sepam tools presentation (.ppt presentation).

- Updated or new commercial documentation :
  - Sepam series 60 & 80 datasheet (update)
  - Sepam series 20, 40, 60 and 80 catalogue (update)

- Updated or new technical documentation :
  - Sepam series 60 & 80 user's manual (update)
  - Sepam IEC 61850 user's manual (update)
  - Sepam IEC 60870-5-103 user's manual (update)
  - Sepam DNP3 user's manual (update)

- Other tool :
  - Sepam series 60 Order form (creation)

10.3. Communication media

All media and materials (launch package) is distributed through PI@net, Shopping Kiosk/Repository and through the IED FTP site :

- ftp://10.195.132.43
  - Username : ftpclient
  - Password : ftpclient
- Directory : PMC_3_Marketing_PUBLIC / Sepam upgrade 5 project

11. Stock and distribution

11.1. Stock

Stock quantity at “SELL” satge gate = 300 units which represent 2 months on sale (sales forecast).

The following table identifies the current build and stocking proposal :

	Minimum quantity at “SELL stage gate date” at IDC
Extended Sepam series 80 memory cartridge (ref : 59701)	300

Following the “SELL” stage gate, the “stock quantity” will be adapted and will follow the forecast and the sales trend. The stock quantity will be reviewed every month.

12. Training

The training course of the series 60 & 80 will be updated.

13. Technical support

IED Helpdesk provides support on Sepam / tool product

Contact :

Sepam IED helpdesk team can be contacted through PI@net, Email or phone.